

Technical Report 1281

Knowledge, Skills, and Abilities for Military Leader Influence

**Michelle Wisecarver, Rob Schneider, Hannah Foldes,
and Michael Cullen**

Personnel Decisions Research Institutes, Inc.

Michelle Ramsden Zbylut
U.S. Army Research Institute

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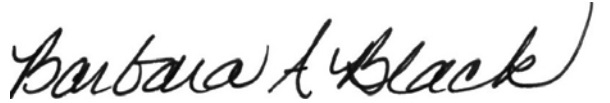
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KNOWLEDGE, SKILLS, AND ABILITIES FOR MILITARY LEADER INFLUENCE

EXECUTIVE SUMMARY

Research Requirement:

Effective military leadership is contingent upon a host of performance capabilities. One capability central to success is effective influence across a variety of contexts and people. In the Army, leaders at all levels must be able to influence others across different types of missions. Leaders must be able to influence their own unit and chain of command, as well as personnel from other government agencies, nongovernmental organizations, and joint, combined, and host nation elements. Because influence has a central role in leadership, it is critical to ensure that influence capabilities are an integral element of the leader assessment and development process. Thus, it is necessary to have a comprehensive picture of the knowledge, skills, abilities, and other characteristics (KSAOs) underlying effective influence behaviors. This report identifies leader influence strategies, describes 64 KSAOs relevant to leader influence, and provides recommendations for measuring and training KSAOs. The identified KSAOs serve as targets for building training and assessment interventions designed to enhance Army leaders ability to influence.

Procedure:

We reviewed existing academic and military literature regarding leader influence, KSAOs related to influence, and training strategies that could be applied to develop these KSAOs. Relevant literature included social capital, power, influence tactics, persuasion tactics, and impression management. Two models of leader influence—one pertaining to building influence capability and one pertaining to applying influence strategies—were developed from the literature.

We organized KSAOs into proximal, medial, and distal predictors (i.e., immediate, mid-range, and distant predictors) of influence behaviors. Proximal predictors included self-regulation and procedural knowledge and skills, medial predictors included declarative knowledge and influence motives, and distal predictors included cognitive attributes, non-cognitive attributes (e.g., personality), and leadership/influence experience variables. We identified existing measures for the KSAOs and we rated measurement approaches for their utility in assessing each KSAO. Additionally, potential training methods were reviewed and considered vis-a-vis the KSAOs.

Findings:

The review indicates that complex relationships among power, influence tactics and influence outcomes exist. With respect to outcomes (i.e., compliance, commitment, and resistance), hard influence tactics (pressure, coalitions, legitimating) are more likely to result in compliance. Conversely, soft tactics—particularly rational persuasion, inspirational appeals, and consultation—result in higher commitment and are more effective at influencing others.

Regardless of the tactic used, influence attempts are more likely to result in favorable outcomes when the leader has high referent power. Research also suggests that applying multiple influence tactics in combination is useful, but research has not yet delineated the best approaches for leaders to combine and sequence tactics. As an added layer of complexity in understanding effective influence, a number of content and contextual factors affect the relationship between influence attempts and influence outcomes. Finally, the predominance of literature in this domain has been conducted using corporate civilian samples and samples from Western cultures, so understanding situations unique to the military is a challenge.

Based on the review, we proposed a key distinction between two major influence processes: building influence capital and applying influence strategies. Both processes are critical to effective influence, but the processes involve different antecedents and should be treated as distinct, but related processes. Building influence capital is the consequence of the actual or perceived power that a leader holds, which can come from a variety of internal and external sources. Applying influence, however, refers to the proactive influence behaviors a leader uses to affect another person's behaviors or beliefs. The two process models seek to describe how different elements from the review can be integrated to represent how leaders build a power base and engage in influence attempts over time.

We identified 64 KSAOs related to leader influence. These KSAOs include abilities (e.g., cognitive ability and social perceptiveness), personality attributes (e.g., locus of control and self-confidence), self-regulation skills (e.g., emotional control and impression management), and a variety of other skills (e.g., cultural intelligence, conflict management, listening skills). We also located existing measures for all but two KSAOs. Additionally, we identified the most effective training methods for developing several of these KSAOs and identified five specific training needs: (1) declarative knowledge of the influence process, (2) declarative knowledge of influence-relevant facts, concepts, and principles, (3) procedural knowledge of how to apply influence-relevant knowledge, (4) self-regulation, and (5) and motivation to influence others.

Utilization and Dissemination of Findings:

This report represents a large-scale integration of several bodies of literature across academic and military sources. This report provides a foundation with which to develop a long-term plan for assessment and development of leader influence in the Army by identifying behaviors leaders use to influence others, KSAOs underlying leader influence, the names of measures to assess KSAOs, the usefulness of measurement approaches for developing new measures, and training recommendations. Results from this research have been used to develop a leader self-assessment of influence strategies, which is currently being validated by ARI. A portion of the influence measure is available in Ramsden Zbylut, Wisecarver, Foldes, & Schneider (2010a, 2010b). Curriculum designers developing a program of instruction on leader influence may find the content of this report useful since the report identifies influence strategies used by leaders, as well as knowledge and skills that underlie influence behaviors.

KNOWLEDGE, SKILLS, AND ABILITIES FOR MILITARY LEADER INFLUENCE

CONTENTS

| | Page |
|---|------|
| DEFINING INFLUENCE | 2 |
| POWER AND INFLUENCE..... | 4 |
| Bases of Power..... | 4 |
| Social Capital as a Source of Power | 6 |
| Links between Power and Influence Outcomes..... | 8 |
| INFLUENCE TACTICS..... | 9 |
| Proactive Influence Tactics..... | 9 |
| Persuasion Tactics..... | 11 |
| Impression Management Tactics | 13 |
| Summary of Influence Strategies..... | 16 |
| LINKS BETWEEN INFLUENCE TACTICS AND INFLUENCE OUTCOMES..... | 17 |
| Using Tactics in Combination | 18 |
| Examining Influence Styles | 19 |
| SITUATIONAL FACTORS..... | 20 |
| Target Characteristics | 20 |
| Message Characteristics..... | 22 |
| Context..... | 23 |
| Influencer Characteristics | 23 |
| ARMY LEADERSHIP DOCTRINE AND OTHER MILITARY DATA | 24 |
| Influence as a Foundation in FM 6-22..... | 24 |
| Influencing Host Nation Personnel..... | 26 |
| INFLUENCE PERFORMANCE..... | 27 |
| KSAOS SUPPORTING INFLUENCE BEHAVIOR..... | 31 |
| Framework of Influence KSAOs | 32 |
| Influence Behavior..... | 34 |
| Leadership Styles..... | 34 |
| Influence Outcomes | 39 |
| Proximal Determinants of Influence Behavior | 39 |
| Medial Performance Determinants | 44 |
| Distal Performance Determinants | 49 |
| IDENTIFICATION OF KSAO MEASURES | 59 |
| Information Captured..... | 59 |
| Sources of Information | 60 |

| | |
|--|-----|
| Literature Review..... | 60 |
| Buros' Mental Measurements Yearbook. | 61 |
| Keyword Search of PsychInfo Database..... | 62 |
| Knowledge of KSAOs and Measures | 62 |
| Measurement Coverage | 62 |
| Summary | 64 |
| RECOMMENDATIONS REGARDING KSAO MEASUREMENT | 64 |
| Specification of Measurement Constraints | 65 |
| Identifying Effective Measurement Methods for KSAOs | 67 |
| Ability Domain. | 67 |
| Non-Cognitive Domain..... | 69 |
| Experience Domain..... | 71 |
| Motives Domain..... | 71 |
| Declarative Knowledge Domain..... | 72 |
| Procedural Knowledge and Skill Domain..... | 74 |
| Self-Regulation Domain | 78 |
| Leadership Styles and Competencies..... | 78 |
| Summary | 80 |
| RECOMMENDATIONS FOR TRAINING..... | 80 |
| Training Influence Skills..... | 80 |
| Trainability of KSAOs..... | 83 |
| Training Content and Methods | 84 |
| Enhancing Transfer | 89 |
| Summary of Training Recommendations | 90 |
| SUMMARY AND CONCLUSIONS | 91 |
| Power and Influence Tactics | 91 |
| Models for Influence Processes | 93 |
| KSAOs and Training..... | 93 |
| REFERENCES | 95 |
| APPENIX A: EXTENDED LIST OF INFLUENCE STRATEGIES AND TACTICS | A-1 |
| APPENDIX B: EXISTING MEASURES OF KSAOS | B-1 |

LIST OF FIGURES

| | |
|---|----|
| FIGURE 1: A MODEL OF SOCIAL AWARENESS AND INFLUENCE (MUELLER-HANSON ET AL., 2007) | 29 |
| FIGURE 2: A PROCESS MODEL FOR APPLYING INFLUENCE..... | 30 |

| | |
|---|----|
| FIGURE 3: A PROCESS MODEL FOR BUILDING INFLUENCE | 32 |
| FIGURE 4: FRAMEWORK OF VARIABLES RELEVANT TO LEADERSHIP INFLUENCE STRATEGIES AND TACTICS | 33 |

LIST OF TABLES

| | |
|---|----|
| TABLE 1: POWER TAXONOMY | 5 |
| TABLE 2: CIALDINI'S (2007) PERSUASION PRINCIPLES AND DEFINITIONS | 12 |
| TABLE 3: IMPORTANCE AND FREQUENCY OF TRANSITION TEAM ADVISOR BEHAVIORS..... | 28 |
| TABLE 4: INTEGRATED LIST OF DIRECT INFLUENCE TACTICS | 35 |
| TABLE 5: LEADERSHIP STYLES AND DEFINITIONS | 37 |
| TABLE 6: PROCEDURAL KNOWLEDGE/SKILLS AND DEFINITIONS | 40 |
| TABLE 7: DECLARATIVE KNOWLEDGE ATTRIBUTES AND DEFINITIONS | 45 |
| TABLE 8: INFLUENCE-RELATED MOTIVES AND DEFINITIONS | 49 |
| TABLE 9: COGNITIVE ATTRIBUTES AND DEFINITIONS | 50 |
| TABLE 10: NON-COGNITIVE ATTRIBUTES AND DEFINITIONS..... | 53 |
| TABLE 11: SUMMARY OF JUDGE ET AL. (2002) META-ANALYSIS RESULTS | 55 |
| TABLE 12: FREQUENCIES OF IDENTIFIED EXISTING KSAO MEASURES | 63 |
| TABLE 13: POTENTIAL METHODS FOR MEASURING KSAOS | 65 |
| TABLE 14: RATINGS FOR MEASUREMENT METHODS FOR KSAOS WITHIN THE ABILITY DOMAIN | 68 |
| TABLE 15: RATINGS FOR MEASUREMENT METHODS FOR KSAOS WITHIN THE NON-COGNITIVE DOMAIN..... | 70 |
| TABLE 16: RATINGS FOR MEASUREMENT METHODS FOR EXPERIENCE AND MOTIVES KSAOS..... | 72 |
| TABLE 17: RATINGS FOR MEASUREMENT METHODS FOR DECLARATIVE KNOWLEDGE (MEDIAL DETERMINANTS OF INFLUENCE PERFORMANCE)..... | 73 |

| | |
|---|----|
| TABLE 18: RATINGS OF MEASUREMENT METHODS FOR PROCEDURAL KNOWLEDGE/SKILLS | 75 |
| TABLE 19: RATINGS FOR MEASUREMENT METHODS FOR SELF- REGULATION KSAOS..... | 78 |
| TABLE 20: RATINGS FOR MEASUREMENT METHODS FOR LEADERSHIP STYLES/COMPETENCIES RELATED TO INFLUENCE..... | 79 |
| TABLE 21: FOUR EXMAPLES OF TRAINING OBJECTIVES FROM PRACTITIONER-DELIVERED TRAINING PROGRAMS..... | 82 |
| TABLE 22: INSTRUCTIONAL METHODS AND STRUCTURAL ATTRIBUTES OF METHODS | 87 |

Knowledge, Skills, and Abilities for Military Leader Influence

Effective military leadership is contingent on a variety of performance capabilities. One capability central to success is the effective application of influence across a variety of contexts and people. In the Army, leaders at all levels must be able to influence others across different types of missions. Leaders must be able to influence their units and chain of command, as well as personnel from other government agencies (OGAs), nongovernmental organizations (NGOs), and joint, combined, and host nation elements.

The centrality of influence to leadership is evidenced in the number of researchers who define leadership using the term *influence* (e.g., see Rauch & Behling, 1984; Tannenbaum, Weschler, & Massarik, 1961; Yukl, 2006). Yukl (2006), for example, defined leadership as “the process of influencing others to understand and agree about what needs to be done and how to do it” (p.8). Rauch and Behling (1984) indicated that leadership is “the process of influencing the activities of an organized group toward goal achievement” (p.46). The Army also gives influence a central role in the definition of leadership, stating: “Leadership is the process of influencing people by providing purpose, direction, and motivation while operating to accomplish the mission and improving the organization” (U.S. Army, 2006, p.1-2).

Because influence has a central role in Army leadership, it is critical to ensure influence capabilities are an integral element of the leader assessment and development process. Thus, it is important to develop an understanding of the knowledge, skills, abilities, and other characteristics (KSAOs) related to successful influence. Despite the importance of influence to leadership, however, a comprehensive list of influence KSAOs does not exist. Having an organized and comprehensive view of characteristics required for success will provide a foundation to develop a long-term plan for assessment and development of leadership in the Army. Given the criticality of influence to Army leadership, developing such a foundation is important.

This report identifies leader influence strategies and KSAOs relevant to leader influence. Successful Army leader development will likely require not only training and assessing specific influence behaviors, but addressing the fundamental knowledge, skills, and abilities that underlie the effective execution of influence behaviors across a variety of operational and in-garrison contexts. Thus, this report also provides recommendations for measuring and training the individual KSAOs. This report describes the (a) influence strategies appropriate for effective leader influence, (b) KSAOs relevant to successful leader influence, (c) existing tools to measure influence KSAOs, and (d) recommended methods to develop influence KSAOs.

This report examines the concept of influence using the literature on both influence and persuasion tactics and strategies—two bodies of literature that have developed separately from one another. From the literature review, two models of influence performance are proposed: applying influence and building influence potential. KSAOs related to leader influence are then discussed, and the report concludes with recommendations for assessing and developing effective influence and influence KSAOs.

Defining Influence

Identifying the KSAOs required for successful leader influence first requires defining what leader influence is. As mentioned previously, the Army Leadership manual (U.S. Army, 2006), as well as leadership researchers, often define leadership using the term *influence*. However, the term *influence* is broad and vague, consisting of multiple related concepts, such as social influence, interpersonal influence, persuasion, and compliance. Moreover, while this report is focused on “leader influence” it is worth noting that the Army leader who is called to influence may not always be the person who holds the formal job position as leader. For example, an Army leader may serve as an advisor to an Afghan General, but that Army leader has no formal authority over the Afghan General. As another example, an Army leader may be required to negotiate with a local Iraqi leader, but neither one of those leaders has any formal authority over the other person. Hence, in reviewing the literature, we examined both influence within the leadership/management domain but also explored research that examined influence that occurred in non-leadership contexts.

Rhoads (2008) defined influence as the cause of human change, which includes change in behaviors, attitudes, or beliefs. Rhoads’ definition highlights the *effect* of the influence on the person being influenced (i.e., the target) and leaves the nature of the cause ambiguous. The term *social influence* represents these effects as general phenomena that take place within groups. This form of influence focuses on the effect of the *group* on individuals and is defined as any change in a person that is a result of the real, implied, or imagined presence of others (Latané, 1981). In other words, exposure to views and/or actions of other group members results in changes to the views and/or actions of individual members.

Social influence has long been a focal topic of inquiry for social psychologists, although increasingly it represents a dynamic and multi-disciplinary field populated by political, consumer, and organizational psychologists, as well as sociologists and communication researchers. Examples of topics examined in the social influence literature include conformity, socialization, peer pressure, obedience, leadership, persuasion, sales, and marketing. As these examples suggest, social influence is a multi-faceted field of research. Much of the research emphasizes how groups influence individuals. Groups may be comprised of peers, family, schools, political parties, religions or cultures. So long as the group is important to the individual (i.e., able identify with the group and see oneself as being a current or future member), then the individual is more likely to be influenced by the group.

Much social influence research has been conducted in the lab with small groups (less than 30 members) in which marked differences in power or authority are not evident. This is noteworthy because social influence tactics themselves are often viewed as *not* relying on the particular power and authority of the agent. Indeed, Pratkanis (2007) defined a social influence tactic as “any noncoercive technique, device, procedure, or manipulation capable of creating or changing the belief or behavior of a target...whether this attempt is based on the specific actions of an influence agent, or the result of the self-organizing nature of social systems” (pp.17-18). Such a definition poses a challenge to understanding how social influence processes apply to leaders because power and authority are central considerations in understanding leadership.

Thus, limiting investigations on influence to non-coercive techniques would leave gaps in understanding leader influence in its entirety.

Anderson, Spataro, and Flynn (2008) underscored the importance of both target and influencer, defining influence as the ability to change the actions of others in an intended way. Mueller-Hanson et al.'s (2007) research on social awareness and leader influence in Army contexts also adopted this approach when it described leader influence in terms of both the influencer and target roles. In Mueller-Hanson et al.'s research, the leader was described as having a direct role in influence, but influence was conceptualized as a process – an unfolding series of actions and reactions over time between the leader and the target. Mueller-Hanson et al. also described four potential goals of leader influence: (1) to change a target's behavior, (2) to impact a target's emotional state (affect or mood), (3) to modify a target's perceptions and beliefs (cognitions), and (4) to change a target's attitudes (which might involve a combination of affect and cognitions).

While influence attempts have four goals, these goals can be translated into three possible outcomes: changing a target action, changing a target opinion, or not changing his/her action/opinion. Yukl (2006) referred to these outcomes as compliance, commitment, and resistance. Commitment reflects an outcome in which an influence attempt results in a target person changing his or her attitude or opinion. That is, the influence attempt is internalized, fundamentally changing what the target feels or believes. Conversely, when compliance is an outcome, a target will do what the influencer requested, but may be apathetic about the request or potentially resentful and angry. It is important to note that, although compliance might not result in an enduring change in attitude or behavior, compliance might be as desirable as commitment in some situations. For example, if a situation requires immediate action, such as a crisis situation, it may be more efficient to gain compliance for the short-term than invest significant effort in trying to change a target's beliefs or attitudes over the long-term. Finally, when resistance is an outcome, the influence attempt is unsuccessful; a target refuses to comply with or commit to what the influencer requested. Additionally, a target might resist either directly or through indirect means, such as delaying the action or calling on higher authorities to intervene.

In sum, the literature on influence indicates that influence attempts of leaders can be broadly conceptualized as consisting of intentional and subconscious processes (Levy, Collins, & Nail, 1998) that shape the behaviors, cognitions, and attitudes of others. Influence attempts result in commitment, compliance, or resistance from targets. Three bodies of scientific literature—the power literature (e.g., French and Raven, 1959), the influence tactics literature (Yukl, 2006), and the persuasion literature (e.g., Cialdini, 2007)—provide insights about the various ways that leaders can influence through conscious and unconscious means. Army publications (e.g., U.S. Department of the Army, 2006) provide additional description about how influence applies specifically to military contexts. While different literatures examine the nature of influence (whether it be called persuasion, influence, power, or compliance), each indicates methods that a leader has at his or her disposal to channel the behavior and attitudes of others. Although some of these literatures have developed in isolation from one another, they are nevertheless compatible with one another and, when examined together, provide a coherent picture of how leaders build power, use power, and behave to gain compliance and commitment across a variety of situations.

Power and Influence

Just as influence is entwined with the essence of leadership, power is entwined with the essence of influence. The concepts of power and influence are so entwined that, if one makes the argument that power is useful only when enacted, power and influence behavior could be viewed as different names for the same concept. However, as Lines (2007) emphasized, latent power can impact a target's attitudes, cognitions, and behaviors even without the direct application of power through influence tactics (i.e., specific behavior engaged in by the leader to influence another). Thus, social power can be considered as the *potential* for influence (Raven, 1993) and a person's capacity to influence a target (Yukl, 2006). Thus, while power and influence are related concepts, they are distinct from one another. Empirical research supports the conceptual distinction between power and influence (e.g., Hinkin & Schriesheim, 1990; Kapoor & Ansari, 1988; Yukl, Kim, & Falbe, 1996).

Research suggests power has multiple components. Kim, Pinkley, and Fragale (2005) proposed four components of power in negotiations contexts: (1) potential power, (2) perceived power, (3) power tactics, and (4) realized power. While the specific definitions for the four components are focused on power in negotiations, Kim et al.'s work highlights the importance of perceived power. In particular, realized power (i.e., the power that a leader possesses) is partly affected by a target's perception (i.e., perceived power). Thus, perceived power underscores the importance of understanding the target's perspective, as well as managing a target's impressions of a leader's power. Kim et al. also emphasized the dynamic nature of power. While power can affect the success or mode of an influence attempt, aspects of the influence attempt, such as the influence outcome, also can affect the amount of power one possesses (Yukl, 2006).

Power-dependence theory provides a useful description of how power functions (Blau, 1974; Emerson, 1964). Power-dependence theory posits that the power an influencer holds over a target is based, in part, on the dependence of the target on the influencer. The dependence is directly proportional to the value a target attributes to an outcome at stake and is inversely proportional to the availability of an outcome through other sources. In other words, the more a target values an outcome, the less likely it is that a target can gain that outcome from other sources, and the more power an influencer therefore yields over a target.

Bases of Power

A significant body of research focuses on bases of power an influencer may have that enable him/her to affect outcomes of value to a target. A leader's bases of power contribute to his or her ability to influence others (Bruins, 1999), as well as to his or her ability to impact items valued by the target. French and Raven (1959) developed one of the first taxonomies of power, which consisted of five bases. Research since then has provided two additional types of power and two overarching dimensions – position power and personal power (see Table 1). All classifications of power bases suggest that the different sources of power are determined by the nature of the relationship between an influencer and a target (e.g. Bass, 1960; French & Raven, 1959; Raven, 1993, 1965; Yukl, 2006).

Table 1

Power Taxonomy

| Type of Power | Definition |
|----------------|---|
| Position Power | |
| Legitimate | The influencer has authority over the target and the target must comply. |
| Reward | The influencer has the ability to provide positive outcomes. |
| Coercive | The influencer has the ability to provide negative outcomes. |
| Information | The influencer has access to useful information. |
| Ecological | The influencer has control over the physical environment, which can include job design, physical features (lighting, noise), and cultural factors (norms, values, beliefs). |
| Personal Power | |
| Referent | The influencer commands respect, admiration, or identification from the target. |
| Expert | The influencer has knowledge and expertise in a given area. |

Note. Based on categories presented in Yukl (2006).

The broadest view of power posits two overarching factors: position power and personal power. Position power is generated from a person's formal position and their authority to use positive and negative sanctions against someone. Conversely, personal power is generated from the particular abilities, skills, and experiences of an individual, which result in expertise, referent power, and charisma (e.g., Bass, 1960; Peiro & Melia, 2003). Research by Anderson et al. (2008) emphasized that an individual's personal characteristics provide them with power particularly when those characteristics provide a good fit with organizational values.

A more recent addition to the power taxonomy is *ecological power* (Yukl, 2006). Using ecological power, a leader can attempt to indirectly influence the target or targets through ecological engineering—by affecting their physical or task environment, and/or the culture of the work group or organization. Changes to the structure and design of employee jobs can have a strong effect on employee behaviors (e.g., Mintzberg, 1983; Oldham, 1976) and can be used to mold employee behavior. In addition, leaders can create shared values, beliefs and norms in a work group or organization to develop a culture that encourages (or discourages) certain attitudes and behaviors (Schein, 1992). Using cultural engineering enables a leader to control the actions of employees without using formal control systems or continuous direct influence attempts (Tushman & O'Reilly, 1996).

While these classifications of power provide an organized approach to understand the origins of power (i.e., the job or the person), a limitation of the two-factor conceptualization of power is that it categorizes rewards and punishments under position power. Classifying rewards and punishments as part of position power implies (a) that only rewards and punishments formally authorized by the organization hold power over others and (b) only individuals in formal positions of authority have the ability to reward and punish. It should be noted, however, that *anything* people value can be leveraged as rewards or punishments, and thus personal drives, motives such as power or achievement (DeCenzo & Robbins, 2007; Kouzes & Posner, 1997), or the social needs of targets (e.g., the need for affiliation and need for acceptance) (Crutchfield, 1955) give influencers a source of power that is attached to the target rather than the influencer's leadership position. With respect to punishment, social actions such as ostracism are viewed as a significant social punishment (Kipling, 2001; 2007), and can be enacted by someone with no position of authority. Thus, anyone with something of perceived value or harm to the target possesses a form of power, and this power is imbued by the perception and needs of the target rather than the influencer's formal position. Understanding that reward and coercive power exists beyond the formal boundaries of one's job position can provide a leader with a more flexible array of tools to influence not only subordinates, but supervisors, peers, and those outside the Army.

Social Capital as a Source of Power

Another source of power not fully addressed in the power taxonomy is the leader's social network. These networks are often referred to as *social capital*, which is signified by the amount of goodwill and support to which an individual has access through his or her network of available social relationships (Adler & Kwon, 2002). Lin (2001) defined social capital as "resources embedded in a social structure that are accessed and/or mobilized in purposive actions" (p. 29). In essence, social capital is a network built on the foundation of a leader's positive social contacts, which are built through a leader's referent power. The concept of social capital, however, is more complex than the concept of referent power. Among other things, social capital can facilitate action by marshalling social resources such as influence, information, and solidarity (Burt, 1992; Podolny & Baron, 1997). In short, social capital theory posits that one's social network determines the extent to which one can gain access to information, wield influence, and effect change within an organization (Brass, 2001; Burt, 1992).

While many inquiries into leadership and influence focus on *human* capital, (i.e., the knowledge, skills, and abilities that are beneficial to individuals), the *social* capital perspective refers to the social relationships that can grant benefits to both individuals and groups (Brass, 2001). Individuals with good social and political skills are adept at developing and using diverse networks of people and are therefore able to build up extensive stores of social capital (Baron & Markman, 2000). Networks of relationships may be thought of as valuable resources, and research with a social capital emphasis highlights the relationships among individuals that enhance cooperation and resource exchange to create organizational value (Day, 2001). Moreover, while a leader can be identified on the basis of his or her human capital, it is social capital that either enhances or constrains a leader's ability to make use of particular skills and abilities (Brass, 2001). As such, leadership ability may, in part, stem from the benefits that arise from the social relationships that comprise social capital.

According to Coleman (1988; 1990), three benefits are associated with social capital. First, obligations and expectations based on reciprocity and trust signify a key benefit of social capital. As Day (2001) noted, commitments in the form of mutual obligations and which are supported by reciprocal trust and respect lie at the heart of a relational model of leadership. Tsai and Ghosal (1998) suggested that trust, in particular, is an important relational asset of social capital, and Kramer (1999) stated that trust is itself a form of social capital-- manifestations of which are the cooperative, altruistic, and extra-role behaviors that serve to enhance collective well-being and which further the attainment of collective goals. A second benefit of social capital is that of norms and sanctions, which represent important by-products of social relationships. Norms and sanctions serve to regulate (i.e., influence) the behaviors of both individuals and groups and reduce risk by making behavior more predictable.

A third benefit of social capital is access to resources, especially in the form of information. Brass (2001) described social networks as conduits of information, with relationships providing individuals access to the human capital of others. Indeed, Burt (1992) found that managers who build networks that go beyond the formal structure of an organization are more likely to benefit in terms of information and entrepreneurial opportunities. Power itself is derived in part from access to and control over important organizational resources, such as information. Thus, power can result in a leader having decreased dependence on others while ensuring that others are more dependent on him or her.

Ammeter, Douglas, Gardner, Hochwater, and Ferris (2002) highlighted the benefits of social capital in relation to politically skilled leaders. The authors noted politically skilled leaders are often viewed favorably among those in their network, which gains them positive reactions to their ideas, enhanced access to important information, and increased cooperation and trust. Moreover, politically skilled leaders appear to know when to seek favors, and others perceive them as likely willing to reciprocate such gestures. Lastly, politically skilled leaders “inspire commitment and personal obligation from those around them, which can be leveraged as a source of additional influence and power, and becomes a resource that maintains and even increases in value” (Ammeter et al., 2002, p. 763).

Social network research reliably indicates that one’s centrality in a network is important to influence and power (see Brass, 1992, for a review). A leader can ensure centrality in several ways: by building a large network (relatively inefficient), connecting to others who are more central (relatively efficient), and/or serving as a central link between previously unconnected others (i.e., mediating the flow of resources) (Brass, 2001). Researchers also have found that accurate perceptions of the social network is related to power in an organization (Krackhardt, 1990). To the extent that one is aware of various interaction patterns, it is easier to both identify and connect with central others, as well as broker connections between key people.

In sum, the social capital literature demonstrates the importance of social capital in understanding power and influence and suggests the existing power taxonomy should be expanded to include social capital concepts. The classification of power into discreet categories, however, has been useful in enabling research that investigates the effectiveness of applying certain types of power across different situations and influence targets. Evidence suggests that certain situations engender the use of certain types of power (e.g., Mulder, deJong, Koppelaar, &

Verhage, 1986), but understanding the potential effectiveness of the different types of power across different situations requires understanding the outcome that the influencer is striving to achieve. The next section examines outcomes associated with applying different types of power.

Links between Power and Influence Outcomes

As indicated previously, influence attempts result in one of three outcomes: commitment, compliance, and resistance. While compliance is likely a sufficient outcome for some situations, other situations require attitude or opinion change in order for the attempt to have lasting success. The links between power bases and these outcomes have been investigated, but the precise relationships between power and influence outcomes are far from resolved (Yukl, 2006). The application of legitimate, reward, and coercive power has been most associated with compliance rather than commitment outcomes (e.g., Thambain & Gemmill, 1974; Yukl & Falbe, 1991; Warren, 1968). For the most part, however, research has not been conducted that links commitment to power, although Warren (1968) found that the attitudinal commitment of subordinates was related to the leader's legitimate, expert, and referent power. Other research has demonstrated a positive relationship between the use of referent and expert power and positive outcomes such as job satisfaction and performance (Hinkin & Schriesheim, 1989; Podsakoff & Schriesheim, 1985; Rahim, 1989; Schriesheim, Hinkin, & Podsakoff, 1991). Findings have shown that subordinate satisfaction and performance are higher when rewards are contingent upon performance (Podsakoff, Todor, Grover, & Huber, 1984).

One reason that a clear link between power bases and influence outcomes has not been demonstrated is that the outcome of an influence attempt likely has multiple causes. Yukl, Kim, and Falbe (1996) indicated that influence outcomes are affected by the influencer's power, the influence tactics they apply, and content-related factors of the request itself. Content factors include elements such as the importance of the request and the level of enjoyment gained by a target for complying with a request.

Other factors that might impact an influence attempt's effectiveness include the way an influence tactic is applied (Yukl, 2006) and person-organization fit (Anderson et al., 2008). For example, the tone used to deliver a message can have a great impact on the effectiveness of the message. Typically, being polite is more effective, although in a crisis situation a direct order using an assertive tone is likely to be most effective (Yukl, 2006). Because the influencer's goal in a crisis situation is likely immediate behavioral compliance rather than an enduring change in attitude, being authoritative and emphasizing legitimate power would be appropriate.

While research on social capital has demonstrated links with several outcomes, most findings are at a general level and do not relate directly to influence outcomes. For example, social networks have been linked to job attainment, job satisfaction, promotions, and power (Brass, 1984; Burt, 1992; Krackhardt & Brass, 1994). In regards to the latter, research found that the activity of "networking" (i.e., socializing/politicking, using social and political skills to get ahead) is something in which successful managers appear to spend a good deal of time engaged (Luthans, Hodgetts, & Rosenkrantz, 1988). Networking activity can enhance one's bases of power, which has implications for the number and types of influence strategies available for leaders to use.

Thus, the literature suggests relationships between power and influence exists, but additional research regarding the nature of the relationships and how such relationships form is required. In part, relationships between power and influence exist at the individual level and arise out of leaders' knowledge, skills, and abilities. Additionally, the broader social context in which a leader operates cannot be overlooked because social networks may play a critical role in a leader's access to and control over organizational resources. Social networks provide multiple leverage points for influence by creating obligations, generating expectations and norms, and providing access to information. A social network also can make a leader the hub around which others gravitate, allowing him or her to wield influence and effect action on a large scale.

In sum, power bases play an important role in influencing others. While power sets a foundation for influence potential, the effectiveness and outcomes of influence attempts depend not only on the base of power that is used and extent of social capital present, but also the strategy a leader adopts in exerting power (Raven, 1993). The following section will discuss these strategies, called *influence tactics*, different taxonomies of influence tactics, and the effectiveness of these strategies.

Influence Tactics

Yukl (2006) proposed three overarching types of influence tactics - proactive influence tactics, impression management, and political tactics - each serving a different purpose. Political tactics focus on influencing organizational decisions, rather than influencing another individual, and are therefore beyond the scope of this report. Proactive influence tactics are behaviors employed by influencers to accomplish an immediate and specific objective, such as compelling a target to do a specific act or change his/her opinion. Impression management tactics are a less direct form of influence and strive to influence targets to have a generally favorable view of the influencer. A leader who engages in impression management activities is seeking to shape a target's beliefs about him or her, such as being perceived as competent. Thus, while impression management activities may not require an immediate behavioral change on the part of a target, impression management activities enhance a leader's power base, which can improve the likelihood that future proactive attempts to influence will be successful. In addition to proactive tactics and impression management activities, a different stream of research in the social psychology literature identified several techniques for persuading others (e.g., Cialdini, 2007). This section discusses the literature regarding proactive tactics, persuasion techniques, and impression management as useful tools leaders can use to influence others.

Proactive Influence Tactics

A number of researchers conducted theoretical and empirical work to develop taxonomies for influence tactics. Seminal work on proactive influence tactics was conducted by Kipnis, Schmidt, and Wilkinson (1980), who collected critical incidents of individuals' successful and unsuccessful attempts to influence bosses, co-workers, and subordinates. Results indicated eight proactive tactics: rationality, ingratiation, assertiveness, exchange, coalitions, upward appeal, sanctions, and blocking. Factor analysis and subsequent research provided support for all but two of these dimensions: sanctions and blocking (Kipnis & Schmidt, 1988; Yukl & Falbe, 1990).

The remaining six categories were expanded by Gary Yukl and his colleagues (e.g., Yukl, 2006; Yukl & Falbe, 1990; Yukl, Lepsinger, & Lucia, 1992), who found empirical support for 11 proactive influence tactics:

1. *Rational persuasion* – Using logical arguments and factual evidence to persuade the target that a goal is important.
2. *Inspirational appeals* – Appealing to a target's values, ideals, or aspirations to increase the target's enthusiasm or confidence.
3. *Consultation* – Soliciting input from a target for achieving a goal.
4. *Ingratiation* – Increasing a target's positive feeling for an influencer using flattery.
5. *Exchange* – Indicating a willingness to reciprocate for assistance in meeting a goal (Note: this can also be done in reverse – an influencer has already done a favor for a target and now is “calling in the favor.”)
6. *Personal appeals* – Appealing to the target's sense of loyalty or friendship.
7. *Coalition* – Using the real or perceived support of others to influence a target.
8. *Collaboration* – Offering to supply assistance or resources to help a target complete the goal.
9. *Apprising* – Explaining the personal benefits to a target if he or she complies with a request.
10. *Legitimizing* – Claiming or verifying one's authority to influence a target.
11. *Pressure* – Using demands or threats to coerce a target into complying with a request.

While Yukl's (2006) set of 11 tactics is among the most widely adopted classification, it is not the only classification. Research also found support for additional tactics not captured in Yukl's (2006) list of 11 tactics. For example, Kipnis et al.'s research (1980) identified 8 categories as sufficient. Conversely, Rhoads (2008) identified over 160 different influence tactics, and suggested that tactics can be viewed at a micro-level of specific tactics, a broader level of clusters of tactics, or an even broader level of underlying dimensions. Levine and Wheelless (1990) identified 53 tactics.

In addition to disagreements about the number of influence tactics, differences also exist with respect to the specificity or focus of tactics. For instance, while Yukl et al. (1991) describe a general tactic called *inspirational appeal*, Levine and Wheelless (1990) differentiated between *moral appeal* and *negative moral appeal*. Levine and Wheelless also divided the tactic *pressure* into differentiated tactics called *threat* and *warning*. Some researchers, however, argue that detailed lists of strategies become a conceptual muddle (e.g., O'Keefe, 1994). Ultimately, the desired level of specificity in influence terminology likely depends on one's purpose of investigation. If strategies are used to predict a broad range of leadership effectiveness criteria, then a broader set of dimensions would likely be most appropriate; if one is interested in developing training for influence skills in specific contexts, a more detailed categorization of tactics might have greater utility.

In addition to identifying a number of proactive tactics, research also has focused on how to conceptually group proactive tactics into higher order categories. In particular, research has supported the usefulness of a higher-order categorization that makes a distinction between “hard” and “soft” tactics (e.g., van Knippenburg, van Eijbergen, & Wilke, 1999). These categories were formed based on the “strength,” of the influence tactic, which is defined as “the extent to which using particular influence tactics takes control over the situation and the target, and does not allow the target any latitude in choosing whether to comply” (Tepper, Brown, & Hunt, 1993, p. 1906). Tactics classified as hard include pressure, coalition, legitimating, and blocking, while those classified as soft include ingratiation, inspirational appeals, and rationality (e.g. Farmer, Maslyn, Fedor, & Goodman, 1997; van Knippenberg et al., 1999). Use of hard versus soft tactics has been associated with the influencer’s self-esteem (Raven, 1992) and competence (van Knippenberg et al., 1999), different leadership styles (Deluga & Souza, 1991), and different influence objectives (e.g., Kipnis et al., 1980; Yukl, Guinan, & Sottolano, 1995).

Persuasion Tactics

Research that addressed proactive tactics stems in large part from the field of industrial/organizational psychology, which focuses on behavior in the workplace. However, an extensive body of research on *persuasion* stems from the social psychology and marketing literature. While the two literatures have overlapping concepts, they have not been well integrated in empirical research.

Persuasion refers to getting others to think, feel, and do what one wants. As a concept, *persuasion* is seemingly indistinguishable from *influence*; however, research on influence and influence tactics has proceeded separately from research on persuasion and persuasion tactics. One reason is that research on influence tactics stems from industrial/organizational literature on leadership, while research on persuasion stems from the social psychological literature and is not specifically focused on leaders or individuals in work settings. Because the influence literature is focused on individuals at work, personal and positional power relationships between the influencer and target play a primary role in defining influence power and tactics. When considering how individuals influence others in non-work settings, however, position power does not play a central role. Consequently, the persuasion literature has a different foundation because it is centered on non-work settings.

At the core of persuasion principles are automated human reactions as opposed to relationships among people. These automated reactions are part of social programming, which follows certain rules or principles. The idea is that if one of the rules is primed for a target, the target will willingly comply by producing the expected response. Cialdini (2007) refers to this as a “click-whirr” reaction, indicating that if one can initiate the “click,” one will persuade the “whirr.” Consequently, persuasion principles leverage natural reactions of people when faced with a certain situation or presented with information in a certain way. Thus, while proactive influence tactics function by leveraging personal and positional power that is dependent on the relationship between the influencer and target, persuasion tactics leverage ingrained properties of human behavior to motivate a target’s behavior in a certain direction.

Cialdini (2007) identified six persuasion principles (see Table 2) based on substantial empirical evidence of their effectiveness in producing attitude or behavior change. He suggested

that all persuasion tactics operate with one of these principles at their core. Beyond these general persuasion principles, more specific persuasion tactics have been identified that leverage the six principles. Several lists or taxonomies of persuasion tactics have been proposed by various researchers. For example, Falbo (1977) identified 16 power strategies using a general context of “how I get my way,” and these power strategies were reduced to two general categories: Rational-Nonrational and Direct-Indirect. As another example, Rule, Bisanz, and Kohn (1985) developed a persuasion taxonomy consisting of 15 persuasion techniques. Appendix A contains a comprehensive list of persuasion tactics found in the literature.

Two persuasion techniques, in particular, have been widely studied. The first technique, which relates to the consistency/commitment principle, is known as the foot-in-the-door technique (Freedman & Fraser, 1966). In the case of the foot-in-the-door technique, targets who are induced to comply with a small request are more likely to comply with subsequent larger demands. Targets are more likely to comply with successively larger requests because of an underlying desire to appear consistent in their actions. The second technique relates to the reciprocating principle and is known as the door-in-the-face technique (Cialdini et al., 1975). In the door-in-the-face technique, a large request certain to be rejected is first made to the target. When rejection occurs, the influencer makes a concession and asks the target to comply with the more modest request. Compliance with the more modest request is likely due to the evocation of the norm of reciprocity (e.g., Shaver, 1987). When the influencer makes a concession, the target feels pressure to reciprocate the concession by agreeing with the more modest request. Meta-analytic data are generally supportive of the foot-in-the-door and door-in-the-face techniques and indicate that these techniques are equally effective forms of persuasion (Pascual & Guéguen, 2005).

Table 2

Cialdini's (2007) Persuasion Principles and Definitions

| Principal | Definition |
|----------------------------|---|
| Establishment of Authority | Establishing one's authority to make the request. |
| Scarcity-Based Appeal | Placing a time limit on an offer or making a goal or opportunity seem rare to increase its perceived value. |
| Reciprocating | Creating a sense of obligation by providing a service or concession. |
| Social Proof/Validation | Stating that many other people have agreed to a similar request. |
| Liking | Building rapport and liking through actions such as cooperation, providing compliments, or appearing similar to target. |
| Consistency/Commitment | Obtaining an initial commitment sets a standard for cooperation that targets then seek to maintain in order to appear consistent. |

While consistent findings on the effectiveness of foot-in-the-door and door-in-the-face techniques is encouraging, the number of different persuasion taxonomies available in the literature makes it difficult to build an empirical understanding of the vast array of potential avenues for persuasion. In an effort to draw disparate streams of persuasion research together, Ojanen (1996) reviewed the literature and suggested that six persuasion strategies were sufficient to cover the large number of strategies in the literature: coercion, threat, offer, guidance, appeals, and appreciation. These six strategies map loosely to the proactive influence tactics as follows: coercion with pressure/legitimizing, threat with pressure/ legitimizing, offer with collaboration, guidance with rational persuasion, appeals with inspirational and personal appeals, and appreciation with ingratiation. Ojanen also proposed that persuasion situations are usually complex and that combinations of persuasion strategies are probably more common than use of persuasion techniques in isolation from one another. Both of these issues – disagreement regarding the number of tactics that should be specified and the use of combinations of tactics– are recurrent themes in the proactive influence tactics literature, as well.

In summary, persuasion research examines influence across a broad range of social contexts, as opposed to the proactive tactics research that focuses on influence in the workplace. Because Army leaders need to influence subordinates and superiors, but also need to influence individuals from host nations and non-Army agencies, power elements and persuasion tactics should be included in the concept of military leader influence. While many persuasion and proactive tactics overlap, such as personal appeal (proactive tactic) and inform personal reason (persuasion tactic), or pressure (proactive tactic) and threaten force (persuasion tactic), the persuasion literature identifies additional methods of influence, such as the foot-in-the door technique.

Impression Management Tactics

While the literature on proactive tactics and persuasion typically focus on specific behavior that an influencer engages in to encourage a target to take action, impression management tactics encompass a different form of influence. Impression management tactics are used to influence how a target perceives an influencer (Yukl, 2006), which may heighten the likelihood that a future influence attempts will be successful. Research indicates that impression management tactics are distinct from proactive tactics. Jones and Pittman (1982), for example, distinguished a tactic called *self-promotion* that involves creating an appearance that one is competent. Godfrey, Jones, and Lord (1986) provided empirical evidence that self-promotion was distinct from a similar proactive influence tactic labeled *ingratiation* which appears in Yukl's (2006) list of proactive tactics.

As a leader, managing one's reputation can be an important form of shaping a target's perception. Reputation is a combination of past successes and projected professional image (Ferris, Blass, Douglas, Kolodinsky & Treadway, 2003) and is often attributed to a leader's political skill (Blass & Ferris, 2007). A leader's image is developed through his or her interactions with others, and the perceptions that others hold about a leader affect his or her ability to exert influence (Bass, 1990; House, 1977). Therefore, to be successful, leaders must be concerned with their image and reputation – in other words, making a good impression.

Although leader success hinges on positive impressions, Kaiser, Hogan, and Craig (2008) differentiated between leader *success* and leader *effectiveness*. According to Kaiser et al., leader success is characterized by career progression. It is related to emergence as a leader and rapid promotion. Leader effectiveness, on the other hand, is determined by what the leader is able to accomplish—i.e., the leader's actual performance. Leader success is facilitated by demonstrating both political and social skill (Sayles, 1993), as well as having a charismatic nature (Agle, Nagarajan, Sonnenfeld, & Srinivasan, 2006). Leader effectiveness is related to modesty and commitment to the organization (Waldman, Ramirez, House, & Puranam, 2001). Moreover, Kaiser et al. (2008) linked the negative aspects of leader success- politicking and managing hollow impressions – to leader derailment (McCall, 1998; McCall & Lomardo, 1983). As such, the long-term success of leaders may depend more on the growth and development of their actual skills, rather than their proliferation of fictitious identities and images.

Organizations, however, are complex social systems (Katz & Kahn, 1978), and leaders must interact interpersonally with many individuals, constituencies, and coalitions (Jacobs & Jacques, 1987, 1990). Frequently, these groups have multiple conflicting needs and goals, and to address these different constituencies leaders must play several roles within organizations (Hales, 1986; McCall & Segrist, 1980; Mintzberg, 1973, 1975). Mintzberg (1975), for example, identified 10 core managerial roles (e.g., developing relationships with peers, engaging in negotiations, motivating subordinates, and resolving conflicts), which in their sum reflect both the social nature of leadership as well as the sheer diversity of leader requirements.

According to role theory (Katz & Kahn, 1978), effectiveness across multiple roles is determined by meeting others' expectations. Each constituency holds expectations of the focal leader for performance standard, attitudes, and values, which must be met to maintain reputation (Tsui, 1984). The leader must adopt the attitudes that the "role sender" expects in order for the role sender to perceive the leader as effective. Since meeting expectations depend on appropriate role behaviors, leader performance ratings can be influenced by the interpersonal impact of the leader. Using 360 degree data and middle managers, Tsui (1984) found that leaders who managed their reputations by meeting the expectations of multiple constituencies were rated as more effective than leaders who failed in reputational effectiveness. Leaders with effective reputations were able to convey an image of themselves as effective in the eyes of subordinates, peers, and supervisors, despite the fact that each group expected something different from the leader.

The various roles of organizational leaders demand that leaders engage in appropriate behavior and project the proper image for the role. According to Ibarra (1999, p. 764), "failure to convey impressions or images that are consistent with one's social role not only diminishes one's effectiveness in that role but may also cause the individual to lose the right to enact the role." By Tsui's (1984) definition, leader effectiveness is based on others' satisfaction and perceptions of leader behavior and activities. While such perceptions are likely influenced by what the leader actually does, perceptions are also likely to be influenced by the leader's impression management behavior.

Impression management has long been a topic of interest to scholars of sociology and social psychology. Impression management involves making a direct and intentional effort to

enhance one's image in the eyes of others. Such efforts can either be goal-directed (i.e., conscious) or unconscious. In either case, impression management is the process by which someone influences the perceptions that others form of him or her by regulating and controlling his or her behavior during social interaction (Leary & Kowalski, 1990). Additionally, attempts at self-presentation are not necessarily deceptive in nature. People typically select a particular image of the self they wish to convey in a situation from a broader selection of self-images they have available (Leary, 1996). However, to the extent that a social identity is not believable, an individual may inadvertently convey an image of being deceptive or manipulative (Leary, 1996).

Not all self-presentations are positive. There are at least goals associated with self-presentation: (1) *ingratiation*, which involves the display of good qualities so that others will hold favorable views, (2) *intimidation*, which involves showing anger or other negative emotions to get others to comply with a request, and (3) *supplication*, which involves the demonstration of vulnerability and sadness to elicit sympathy and assistance. Whether one chooses to present oneself in a positive or negative light will likely be determined by which presentation method the influencer believes will most influence the target's behavior in the desired direction. In most cases, however, people will achieve desired ends to the extent that they come across to others as friendly, competent, ethical, and attractive, and this is why self-presentation strategies are often exhibited in a positive and socially desirable direction (Leary, 1996).

How leaders are perceived by others can, therefore, impact a leader's status and ability to influence (Cronshaw & Lord, 1987). Leaders must maintain impressions of competence and effectiveness in order to influence others (Bass, 1990; House, 1977) and often must exaggerate their successes and minimize their failures (Yukl, 2006). Some researchers view impression management as a special and subtle form of influence (Griffin & Moorhead, 2009). Likewise, in a discussion of charismatic leadership, DuBrin (2009) argued that charismatic leaders use impression management to cultivate particular kinds of relationships with group members. DuBrin argues that charismatic leaders take steps to create a favorable, successful impression, "recognizing that the perceptions of constituents determine whether they function as charismatic leaders" (p. 69). Indeed, the related tactic of ingratiation has been linked to career success (Judge & Bretz, 1994), and evidence shows that high self-monitors—those who regulate their behavior based on demands of the social situation—are promoted at a faster rate than low self-monitors (Kilduff & Day, 1994).

Despite the value leaders may find in impression management, it has a dark side. Integrity seems to be a universally desired value (Rokeach, 1973), and leaders are expected to be trustworthy, just, and honest across cultures (Dorfman, Hanges, & Brodbeck, 2004). Although the intention of impression management is to appear in a positive light in the eyes of others, these attempts carry an inherent risk of backfiring and producing a negative image (Jones & Pittman, 1982; Wayne & Ferris, 1990). That is, "for every desired image that is sought by the user of impression management, there is a corresponding undesired image that is risked" (Turnley & Bolino, 2001, p. 351). Namely, the manager of impressions risks being seen as inauthentic and lacking honesty.

Scholars have begun to examine how leaders can avoid potential pitfalls of impression management strategies gone awry. For example, Xin (2004) reported that some impression

management styles are more effective than others. Moreover, she found that these styles correlated with cultural background. Specifically, Xin (2004) found that Asian American managers engaged in impression management styles focusing on job competency, whereas European American managers engaged in an impression management style that focused on general personal accomplishment and value. Xin found that the style used by Asian Americans was less effective and did not produce as much upward mobility as the style used by European Americans. She argued that a job competency impression management style is more easily detected as an attempt at influence and frowned upon in American culture. As such, findings suggest that impression management activities in one culture may not generalize to other cultures.

In sum, research indicates that it is important for leaders to manage the perception others have of them. Impression management serves to ensure that leaders appear competent and effective to others. In essence, impression management allows leaders to build their bases of power – perhaps expert and referent power at a minimum. However, if handled incorrectly, impression management strategies can sometimes backfire, resulting in the leader appearing to be dishonest and inauthentic.

Summary of Influence Strategies

A review of the influence literature reveals several bodies of research that have progressed independently - influence tactics, persuasion, and impression management. While influence tactics leverage personal and positional power and depend on the relationship between the influencer and a target, persuasion tactics leverage conditioned elements of human behavior to motivate an individual's behavior in a certain direction. Findings from research on influence tactics suggest that a taxonomy of 11 proactive influence tactics is viewed as sufficient to describe influence in the corporate workplace. While these 11 tactics are useful for Army leaders, current missions require that leader influence extend beyond the chain of command. Thus, the 11 well-established influence tactics may be insufficient to adequately address the range of situations Army leaders might encounter. Persuasion research, on the other hand, examines influence across a broader range of social relationships. This research identified 6 general persuasion principles, and a large number of specific persuasion techniques. While many persuasion techniques overlap with the 11 proactive influence some, such as emotional appeals, do not and should be integrated into the list of influence tactics/techniques.

Impression management is unique and not addressed by the list of proactive influence tactics. Research suggests that how leaders are perceived by others can impact a leader's status and ability to influence. Leaders must maintain impressions of competence and effectiveness in order to influence others. Impression management tactics can be very powerful and should be integrated into the list of influence tactics/techniques and leveraged as appropriate.

The next section examines research on the effectiveness of various influence strategies and their relationship with influence outcomes. Most of the research discussed is drawn from the literature on proactive influence tactics. To the extent that proactive tactics overlap with persuasion and impression management strategies, findings from the proactive influence literature might be generalized to the persuasion and impression management literatures.

Links between Influence Tactics and Influence Outcomes

Considerable research has examined the relationship between influence tactics and outcomes, primarily within the proactive influence tactics literature. Research has examined the relationship between influence tactics and distal outcomes, such as promotion, salary, or performance assessment (e.g., Higgins, Judge, & Harris, 2003), as well as the relationship between influence tactics and the effectiveness of those tactics in achieving the more proximal outcomes of compliance and commitment. Research suggests that some proactive tactics are more effective than others in achieving compliance versus commitment (e.g., Brennan, Miller, & Seltzer, 1993; Yukl & Tracey, 1992), although conclusions remain tenuous (e.g., Brennan et al., 1993).

Yukl (2006) theorized that the usefulness of different proactive tactics depended on the situation, although some tactics tend to be more effective than others (Yukl & Tracey, 1992). In order to organize the factors that might impact the outcome of an influence attempt, Yukl and Tracey (1992) developed a model for predicting the success of using different influence tactics and proposed five factors:

- 1) Resistance of the target for the request
- 2) Potential of the tactic to influence target attitudes about the request
- 3) Influencer possession of an appropriate power base for the tactic
- 4) Influencer skill in applying the tactic
- 5) Prevailing social norms and role expectations about using the tactic in the situation

Yukl and Tracey's research (1992) found that rational persuasion, inspirational appeal, and consultation were the most effective tactics in achieving target commitment and producing higher ratings of the influencer's effectiveness. Pressure, coalition, and legitimating were more likely to correlate with lower target commitment and lower ratings of effectiveness. While ingratiation and exchange were moderately effective for gaining subordinate and peer commitment, they were not effective for influencing superiors. Other research examining strategy effectiveness has drawn similar conclusions (e.g., Falbe & Yukl, 1992; Fu & Yukl, 2000; Yukl, Kim & Chavez, 1999; Yukl, Kim & Falbe, 1996).

Such research focused on target commitment as a more superior outcome than compliance. However, in some tactical military situations compliance may be a sufficient goal, and influencing targets quickly may be a more important outcome than gaining commitment. In these situations gaining compliance may be sufficient and preferable if compliance can be gained more quickly than commitment. No research was located, though, that examined whether one or the other outcome could be achieved more quickly. An additional complication of examining the outcome of influence strategies is that, although the different tactics can be measured separately and represent unique constructs, the tactics are often used in combinations or sequences, rather than alone (Yukl, Falbe, & Yoon, 1993).

Using Tactics in Combination

While some research focused on determining the effectiveness of influence tactics in isolation, it is also useful to explore the impact of influence tactics used in conjunction with one another. Some evidence suggests that using more than one tactic during an influence attempt is useful. For example, Case, Dosier, Murkinson, and Keys (1988) found that influence attempts that used two proactive tactics were related to more successful outcomes than were attempts that used a single tactic. Case et al. (1988) did not examine the relative effectiveness of different tactic combinations, however.

The effectiveness of a specific combination of tactics likely depends on the effectiveness of the component tactics. Falbe and Yukl (1992) found that using a single soft tactic (i.e., tactics that rely on personal power, such as ingratiation or consultation) was more effective than a single hard tactic (i.e., tactics that rely on authority and position power, such as pressure or coalition). Moreover, combining two soft tactics, or a soft tactic and rationality, was more effective than any single tactic or a combination of hard tactics. Yukl, Falbe, and Youn (1993) also examined the use of combinations of proactive tactics and found that certain tactics were typically used in combination with other tactics: inspirational appeals, consultation, collaboration, apprising, ingratiation, and legitimating. The remaining proactive tactics, such as rational persuasion, were equally likely to be used alone or in a combination. Yukl et al.'s research suggested that leaders first apply influence tactics that are most likely to accomplish their goals with the least amount of effort or cost. If those do not work, or if a considerable level of resistance is expected by the target, additional tactics will be applied.

Yukl (2002) summarized findings about the frequency of use and relative utility of different proactive influence tactics. Yukl concluded that the most effective forms of influence tend to be rational persuasion, inspirational appeals, consultation, and collaboration. Other moderately effective tactics include apprising, ingratiation, exchange and personal appeals. In contrast, the tactics least likely to be effective are coalition tactics, legitimating tactics, and pressure. Yukl's assessment of the relative effectiveness of different influence tactics was further substantiated by a review of the social influence literature conducted by Ferris et al. (2002). Based on their extensive review, the authors concluded that supervisor-focused ingratiation, rational appeals, inspirational appeals, and consultation are associated with the most positive outcomes. Among those tactics that are more likely to have negative effects, Ferris et al. highlighted the use of pressure.

Ferris et al. (2002) called attention to the use of *supervisor-focused* ingratiation, which leads to the question of whether the directional use of tactics has been studied more broadly. Yukl (2002) provided some insight into the use of supervisor-focused ingratiation, reporting that rational persuasion is widely used in upward, downward, and lateral directions. In contrast, inspirational appeals and pressure are typically used to achieve downward influence. A related set of tactics that are predominantly used for both downward *and* lateral influence are consultation, collaboration, apprising, ingratiation, exchange, and legitimating. Ammeter et al. (2002) noted the finding that ingratiation is directed most often toward subordinates and peers contradicts other research (Liden & Mitchell, 1988, 1989; Ralston, 1985) that suggested motives to ingratiate are greatest for subordinates seeking to influence superiors. Ammeter et al.

suggested one possible explanation for the contradiction is that ingratiation was used more often in downward and lateral directions precisely *because* it is less obvious and less likely to be received with suspicion when directed at subordinates and peers. Finally, Yukl (2002) identified personal appeal and coalition tactics as being used at the lateral level most extensively.

To summarize, research indicated that attempting multiple tactics is a useful approach, and that some tactics may often be used in combination with one another as opposed to being used in isolation. When leaders attempt influence, they tend to first try a tactic that is likely to accomplish the objective with the least effort and cost, and then follow up with additional tactics as required. The relative effectiveness of different combinations and sequences of tactics has not been delineated, although evidence suggests that the effectiveness of using multiple tactics is likely dependent in part on the effectiveness of each tactic in isolation.

Examining Influence Styles

Another way to examine patterns of influence tactics is to examine the extent to which individuals use a consistent style, or pattern, of influence behavior over time. Interest in influence styles stems from the relatively common observation that people vary in the extent to which they use the influence strategies available to them. Some people rely primarily on one or two strategies that they believe work well, while others may use a repertoire of strategies in combination to influence others. Unfortunately, empirical research on influence styles has been limited (Yukl & Chavez, 2002). The following discussion highlights a few attempts to substantiate the role of influence styles in influence episodes and presents some tentative conclusions based on the reviewed research.

Perreault and Miles (1978) were among the first to investigate empirically whether individuals could be categorized with respect to their influence preferences. Five groups of people possessing different influence styles were identified. The first group comprised individuals who used multiple influence strategies. Individuals who characterized the second group tended to use expert knowledge as a basis for influencing others, while the third group was characterized by friendly tactics. The fourth group consisted of individuals who used their positions in the organization to influence others. The fifth group consisted of individuals who did not engage in influence attempts.

Kipnis, Schmidt, Swaffin-Smith, and Wilkinson (1984) identified combinations of managerial influence strategies. Using the Profiles of Organizational Influence Scale (POIS; Kipnis & Schmidt, 1982), which measures six tactic categories (rationality/reason, ingratiation, exchange/bargaining, assertiveness, coalition, upward appeal), they examined whether styles characterize the way managers used influence. The authors reported three influence styles: (1) *Shotgun* managers used the most influence and emphasized assertiveness and bargaining, (2) *Tactician* managers used an average amount of influence and emphasized reason, and (3) *Bystander* managers used little influence with their superiors. These influence styles correspond to three of Perreault and Miles' (1978) influencer types: multiple influence users, expertise users, and non-influencers. Kipnis and Schmidt (1988) later added a fourth influence style they called *Ingratiation*, which is characterized by managers who use friendliness more than other tactics.

To examine whether influence styles are generalizable, Farmer and Maslyn (1999) replicated Kipnis and Schmidt's (1988) research using Schriesheim & Hinkin's (1980) measure, two different samples, and different aggregation rules for reporting influence use with each sample. Farmer and Maslyn found support for the Shotgun, Tactician, and Bystander styles, but not for Ingratiation. On the basis of their findings, the authors proposed that a configurational approach to influence use is promising and should be pursued further by researchers.

While findings from the previously cited research are intriguing, some have suggested the research is flawed, limiting the extent to which meaningful conclusions should be drawn. Yukl and Chavez (2002) noted that none of the research adequately examined the construct validity of the influence styles identified, nor did the research investigate whether styles contribute incremental validity when examined in relation to other constructs. Nevertheless, the idea that people take a consistent approach to influence seems to make intuitive sense and is worth further investigation. Understanding patterns of influence tactics that leaders use could have implications for building self-awareness and leadership skills.

Situational Factors

A number of situational factors have been identified that affect the application and effectiveness of different influence or persuasion tactics. As previously noted, Yukl and Tracey (1992) developed a model to predict the success of using different influence tactics, and proposed five factors: target resistance, characteristics of the influence tactic, influencer power bases, influencer skill in applying the tactic, and social norms/expectations regarding the tactic. Later, Yukl et al. (1996) identified the influencer's power, the influence tactics the influencer applies, and content-related factors of the request as having the most important effects on influence outcomes. Similarly, from the persuasion literature, McGuire (1985) identified four factors that affect persuasion: (a) the source, (b) the message, (c) target characteristics, and (d) situational context factors. These lists are different but overlapping, with some categories functioning as a subset of other categories (e.g. "target resistance" as a subset of "target characteristics"). In addition to the factors in these lists, the desired outcome or goal of the influence attempt (e.g., commitment or compliance) is likely important in determining the utility of a given influence strategy (Yukl, 2006). When all of these potential situational factors are combined to form an integrated list, there are seven broad categories: goals, bases of power, characteristics of the influence tactic, target, message, context, and influencer/source. Because the first three categories were discussed previously in this report, they will not be discussed again in this section. Hence, the discussion begins with target characteristics and then continues with message, context, and influencer characteristics.

Target Characteristics

Characteristics of the target can be considered part of the "situation" faced by a leader. These characteristics include factors such as the target's status, individual differences, his/her mood, the extent to which the target resists the persuasion attempt, and the target's trust in the leader. One of the most common variables examined with respect to influence strategies is the target's status – typically subordinate, co-worker, or superior. For example, tactics such as inspirational appeal and consultation are used more often with subordinates than superiors,

versus coalition tactics used more often for peers and superiors (e.g., Kipnis, Schmidt, & Wilkinson, 1980; Yukl & Falbe, 1990). Other research indicated that inspirational appeal, ingratiation, and pressure were typically attempted to influence subordinates; personal appeal, exchange, and legitimating were attempted with peers; coalitions were attempted most with peers and supervisors; and rational persuasion was the tactic used most often with supervisors, although rational persuasion is used extensively for all target groups (Yukl, Falbe, & Youn, 1993; Yukl & Tracey, 1992). Kipnis et al. (2007) found that as the status of the target person increased, influencers placed more reliance on rational persuasion strategies.

Individual difference variables such as self-monitoring and attitude strength have an effect on influence outcomes as well. For example, high self-monitors tend to be more influenced by appeals to image or status than low self-monitors, who are more influenced by messages that make appeals to values or quality (Petty & Wegener, 1998). Other variables likely to have an effect include attitude strength (strong attitudes tend to be more resistant to change), and issue-relevant knowledge (individuals with more issue-relevant knowledge tend to be more resistant to influence attempts on counter-attitudinal messages and more accepting of pro-attitudinal messages). Related to issue-relevant knowledge is persuasion knowledge (Friestad & Wright, 1999). A target's persuasion knowledge may also play a role in the influence strategies that should be used by a leader. The more targets know about the strategies a leader is using to influence them, the more difficult the influence attempt is likely to be, especially when the leader is attempting to influence someone to do something they do not want or have to do.

With respect to target resistance, different strategies and tactics may need to be used depending on the amount of resistance shown by a target. Influence is often about changing a target's attitude toward something and subsequently generating attitude-consistent action. For example, a target for whom a given attitude is of great importance may require more intensive persuasion episodes in which his or her negative emotions and cognitions are addressed through reframing (assuming the goal is to change the target's attitude rather than merely a superficial level of behavior). For example, Zuwerink and Devine (1996) reported that individuals were more resistant to counter-attitudinal messages that addressed attitudes of importance to them. Furthermore, individuals who placed importance on their attitudes became irritated and generated more negative affective elaborations and negative cognitive elaborations than did individuals who placed low importance on the attitude.

The respect and admiration that a target has for a leader is another target characteristic that could impact a leader's power. Though not immediately obvious, some research implicated person-organization fit as a possible determinant of a target's respect for a leader. Anderson et al. (2008) found that personality traits were differentially effective depending on whether the organization was a consulting firm or an engineering department. As suggested by Anderson et al., sociability may be more respected in team-oriented cultures, whereas conscientiousness may be more respected in a technical culture. Thus, the perceived "fit" of a leader with his or her organization may have an effect on that leader's ability to acquire the power necessary to be effective.

Some research has demonstrated the role of mood in selecting an influence tactic. For example, DeSteno et al. (2004) showed that framing a persuasive message to match a target's emotional state increases the likelihood that targets will be persuaded that the argument is good,

will have a positive attitude toward the message, and will act on the message. As such, a leader might consider adjusting his or her influence strategy based on his or her assessment of the target's mood.

Finally, a target's trust in his or her leader is an important aspect of influence. Dirks and Ferrin (2002) conducted a meta-analysis in which they investigated the antecedents and outcomes of trust in leadership. The targets' trust in the leader correlated with a host of outcome variables, including intent to quit, organizational commitment, job satisfaction, leader-member exchange, and organizational citizenship behavior. Antecedents of trust in leadership included transformational leadership, transactional leadership, distributive justice, procedural justice, interactional justice, unmet expectations (negatively), participative decision-making, and perceived organizational support.

A target's relationship with his or her leader (e.g., shared experiences, status differential, culture differential, Leader-Member Exchange (LMX), and power differential) also plays an important role in the leader's potential to influence. Furst and Cable (2008) reported that the strength of LMX moderated targets' resistance to three influence strategies: sanctions, legitimization, and ingratiation. Specifically, when subordinates have a poor relationship with their leader, the leader's use of sanctions is more likely to result in resistance on the part of subordinates. Similarly, a poor subordinate-leader relationship is also more likely to result in subordinate resistance if the leader uses either legitimization or ingratiation tactics.

Message Characteristics

Message characteristics are features of the communication, including the topic of the persuasion attempt, the position advocated by the source, and the manner in which the persuasive message is communicated and organized. Regarding the message topic, research suggests that the importance and relevance of the topic to the target, as well as the level of enjoyment gained from complying with the request, affect influence outcomes (Yukl et al., 1996). Message quality had direct and indirect effects on influence through attitude and resistance to attitude change (Zuwerink & Devine, 1996).

Another message characteristic is the manner in which the persuasion attempt is presented, with the quality of the persuasive argument being one example (Yukl, 2006; Wegener & Petty, 1998). As noted earlier in the report, the tone used to deliver a message can impact the message's effectiveness. For example, using an assertive tone and a direct order may be optimal in crisis situations (Yukl, 2006). Additionally, Mulder, Ritsema van Eck, and de Jong (1970) found that subordinates associated a confident, firm approach with expertise and authority.

Wegener and Petty (1998) noted that relatively little is known about what makes an argument persuasive. One possibility is that indicating that compliance will result in certain consequences is persuasive only to the extent that those consequences are likely and desirable (Fishbein & Ajzen, 1972). Another possibility is that providing a causal explanation for why a desired consequence is likely to occur will make an argument more persuasive. Additionally, the way an argument is framed has been closely studied as a message variable (Wegener & Petty, 1998). Some research has shown that negatively framed arguments will have greater impact on attitudes than similar positively framed arguments. Additional research has indicated, however,

that negatively framed arguments have a larger impact on attitude change when targets process the information in the message more carefully. When people are not motivated to scrutinize a message, positively framed messages can be more impactful than negatively framed messages.

Context

Context variables are attributes of the setting in which an influence attempt is made. The Army Leadership manual (FM 6-22) notes the importance of context factors (e.g., time available and risk involved) in selecting an influence tactic, suggesting that compliance-focused influence tactics should be used for situations in which little time is available and risk is high.

The persuasion literature suggests an important context variable is how other targets of the message react to that message. When people are in a group, others' reactions tend to make persuasion more likely when targets do not carefully process the message. When cognitive processing is high, however, others' reactions do not affect acceptance of attitudes in those situations; only message quality influences attitudes. Another important context variable is communication channel, or the way in which the persuasive message is presented (e.g., on paper, computer screen, audiotape, or videotape). A key distinction regarding communication channel involves externally-paced presentation of persuasive messages versus self-paced presentation. Self-paced messages tend to be more thoroughly scrutinized than externally-paced messages, making argument quality more important and more peripheral persuasion cues less impactful. The persuasive message must be sufficiently complex, however, to make added scrutiny useful (Petty & Wegner, 1981).

Another important context factor is the norms and expectations associated with a given situation. Conversational interaction and behavior can be viewed from the perspective of social appropriateness and/or efficiency (Kellermann, 2004). Social appropriateness would be a critical expectation in some situations, requiring influence tactics that are polite, courteous, and respectful. Other situations, however, such as those in military operations on the ground, may promote efficiency expectations; focusing on behavioral expediency, where efficient behaviors are direct, immediate, and to the point, wasting neither time, energy, effort, nor steps.

Other situational factors have been examined with respect to use of influence tactics, such as gender, the size of the individual's work unit, and the presence of unions (Kipnis et al., 1980). While size of the work unit and presence of unions affected individual's choice of influence tactics to use, gender did not. In large work units, individuals' were more likely to use assertiveness, sanctions, and upward appeals to influence subordinates, suggesting great reliance on impersonal controls. If an organization was unionized, individuals were more likely to use ingratiation tactics to influence subordinates, to avoid using assertiveness with coworkers, and to use rationality less and blocking (e.g., stopping work) more when influencing their supervisor.

Influencer Characteristics

Because the influencer is the source of the tactics used, characteristics associated with that individual may be considered an element of the situation and, like the other situational factors discussed, are potentially related to influence outcomes. One factor previously discussed is an influencer's power and credibility (e.g., expertise, trustworthiness). In addition, influencer

skill in applying tactics is critical to the influence outcome (e.g., Yukl & Tracey, 1992). For example, because the apprising tactic involves an explanation of the benefits of compliance, an influencer who attempts apprising must be capable of discerning a target's needs and motives. To apply effective rational persuasion requires that an influencer be capable of presenting logical arguments and factual evidence. Finally, effectively using inspirational appeals requires energetic and enthusiastic oral communication skills. Because influencer knowledge, skills, abilities and other characteristics (KSAOs) are likely important to the success of influence attempts, they are discussed in greater detail later in this report. However, before discussing the KSAOs that underlie effective leader influence, it should be noted that the previous research was drawn from the academic literature. Thus, one drawback of the research presented is that it does not account for some of the unique conditions under which military leaders operate (e.g., under threat, in different cultures). The next pages describe how some of the influence concepts reported earlier in this paper have been studied and adjusted to reflect the military context.

Army Leadership Doctrine and Other Military Data

Influence dominates the Army's conception of leadership, which is described as the *process of influencing people*. The Army Leadership Manual (FM 6-22) emphasizes influence repeatedly in its leadership doctrine for all officers, noncommissioned officers (NCOs), and Army civilians. This section reviews how FM 6-22 views leader influence and influence strategies and report findings from data collected from Military Transition Teams (MiTTs) that provide insight into the relative importance of different influence tactics for leader performance in a combined stability and support environment.

Influence as a Foundation in FM 6-22

As presented in the introduction, the Army Leadership Field Manual (FM) provides the following definition for leadership:

***Leadership** is the process of **influencing** people by providing purpose, direction, and motivation while **operating** to accomplish the mission and **improving** the organization (U.S. Army, 2006, p.1-2).*

Three key elements of leader performance are extracted from FM 6-22's definition of leadership: Influencing, Operating, and Improving, where Influencing is subsequently defined as "getting people – Soldiers, Army civilians, and multinational partners - to do what is necessary" (U.S. Army, 2006, p. 1-2). A leader is described as anyone who has an "assumed role" or "assigned responsibility" and inspires and influences people to accomplish organizational goals (U.S. Army, 2006, p. 1-1). The act of leading and influencing, therefore, extends beyond formal positions and issuing orders to include functioning in leadership roles in which the leader may not have the benefit of formal authority, such as current combined missions (e.g., working with joint, allied, and multinational partners). The domain of Influencing is further divided into three categories - providing purpose/vision, direction, and motivation - which are executed through both direct and indirect means.

To delineate the competencies required for successful leader performance, Army Doctrine identifies three core leader competencies: Lead, Develop, and Achieve. Within these higher order categories, leading is further differentiated to include “Leads others,” “Extends influence beyond the chain of command,” “Leads by example,” and “Communicates.” The requirements that are particularly relevant to influence are found in the “Leads others” and “Extends influence” categories. These sections of the FM describe the importance of applying different influence techniques to achieve compliance versus commitment, and they convey the importance of using influence to provide purpose, motivation, and inspiration.

The Leadership FM describes 10 techniques leaders use to influence others:¹

- Pressure
- Legitimate Request
- Exchange
- Personal Appeal
- Collaboration
- Rational Persuasion
- Apprising
- Inspiration
- Participation
- Relationship Building

In comparing these influence techniques with the 11 proactive influence tactics presented previously, there are only three substantive differences in the categories. The Army list does not include ingratiation and coalition, and it adds a technique called relationship building, which is not included in the tactics list from the literature (Yukl, 2006). FM 6-22 describes relationship building as a technique in which leaders build positive rapport and a relationship of mutual trust, making followers more willing to support requests. The FM advises that relationship building is best applied over a period of time. Examples of the technique include showing personal interest in a follower’s well-being, offering praise, and understanding a follower’s perspective.

The Leadership FM also identifies three situational factors that should be considered in applying an influence technique, although they are not labeled as situational factors per se. The first is a characteristic of the influencer - that the influencer must be perceived as authentic and sincere in order to achieve commitment from the target. The FM emphasizes the importance of values and influencing for the right reasons. A leader’s authenticity has implications for impression management and the degree to which the influencer can project an appropriate image, but do so in a genuine fashion that leads to increased commitment from the target. The second is also an influencer characteristic – the leader’s hierarchical level in the organization, specifically direct-level versus organizational level leaders. The manual suggests that influence techniques are likely to differ based on the leader’s hierarchical level, where direct-level leaders will be more likely to use compliance techniques to accomplish their activities and organizational-level leaders will be more likely to pursue a longer-term focus and use indirect influence to build commitment. The third variable is a context variable - the criticality of the situation. The FM indicates that criticality should be considered, such that when a situation is urgent and involves

¹ The Army refers to influence *techniques* as opposed to influence *tactics* because the term *tactics* has a different connotation in the military than in academia.

high risk, influence techniques should be selected that focus on gaining compliance as opposed to commitment.

In sum, a number of key themes emerge in FM 6-22 regarding influence:

- Influence is a critical element of leadership, and perhaps the *most critical* element of leadership.
- Leader influence extends in many directions, not just downward.
- Compliance and commitment are both important influence goals in the military, and it is important to identify the right goal for the situation, based at least in part on the situation's criticality.
- Leaders need to have an awareness of influence techniques and how they work in order to influence others across different situations.
- Relationship building is a critical influence technique for Army leaders.

Despite the importance of influence to effective Army leadership, most research on influence tactics has been conducted in civilian settings. Research conducted by Ramsden Zbylut et al. (2009), however, provided some insight into influence techniques used by Army officers serving on MiTTs.

Influencing Host Nation Personnel

MiTTs were created to teach, coach, and mentor Iraqi and Afghan units to ensure they become a capable fighting force that is viable after the team departs. Ramsden Zbylut et al. (2009) were interested in identifying cross-cultural behaviors that were critical to advisor effectiveness in the current operating environment. They surveyed 565 MiTT advisors upon returning from Afghanistan and Iraq. Respondents completed a survey consisting of 151 advisor behaviors, which were each rated for frequency and importance. In addition to examining behaviors at the item-level of analysis, similar behaviors were grouped at the scale level of analysis, resulting in 42 scales.

The relationship between an advisor and his/her foreign national counterpart is different than that between a military leader and subordinate in that no formal hierarchy defines the relationship. Advisors do not command their counterparts, but instead seek to provide mentorship and guidance (Kranc, 2007). Because of the nature of the advisor-counterpart relationship, Ramsden Zbylut et al. (2009) posited that advisors would need to rely upon a broad base of influence capability in order to successfully influence counterparts to adopt a desirable course of action, goal, way of thinking, or training approach. Results indicated that *role modeling*, *establishing credibility with one's counterpart*, and *being respectful* were among the most frequent and important advisor behaviors. Results also indicated that all three behaviors were related to advisors' reports of how receptive their counterparts were to their advice and influence. Ramsden Zbylut et al. (2009) referred to these as impression management tactics, which, as recently discussed, are techniques used to influence a target's beliefs or perceptions about one's skills and capabilities or to build a better relationship (Yukl, Chavez, & Seifert, 2005; Yukl, Seifert, & Chavez, 2008). These findings suggest that building expert and referent power would be valuable in these situations.

Table 3 shows Transition Team advisor behaviors from Ramsden Zbylut et al. (2009) ranked by mean importance. Behaviors are sorted conceptually into those reflecting impression management or foundation building, and those reflecting proactive influence techniques. For the latter, we further sorted behaviors into hard, soft, and rational tactics. Findings suggest that impression management behaviors are among the most important and most frequent advisor behaviors, and that success requires not only proactive influence tactics, but also the more broad-based efforts to establish a firm foundation from which to employ such tactics.

In sum, data from the field suggest that, while proactive influence tactics are important for advisors, impression management behaviors were more important. Impression management behaviors served to build certain foundational elements (e.g., credibility and trust) in the advisor's relationship with the host nation personnel. These elements could then be leveraged in future influence situations. The next section elaborates further on this observation and presents two complementary process models that depict leader influence performance from not only the perspective of applying strategies in specific situations, but also incorporate ideas that underscore the notion that individuals can build and maintain a foundation for influence (e.g., social capital, landscaping).

Influence Performance

An extensive body of research on influence and persuasion strategies and concepts exists. The research is limited, however, with respect to minimal use of military samples, little integration of the persuasion and influence literatures, and insufficient research on applying combinations and sequences of influence strategies. Ultimately, greater understanding of effective leader influence strategies is needed to either select leaders who have the appropriate KSAOs to succeed in a given role, or provide training and guidance that will enable leaders to develop the KSAOs required to succeed.

The literature review identified a number of variables that impact the leader influence process. The seven categories identified were goals, bases of power, influence tactics, characteristics of the target, message, context, and influencer/source. The effects of these variables on influence performance and their interrelationships are complex; research suggests many dyadic relationships exist, some relationships having direct and indirect effects on influence. To move toward a prescription for selection and training, however, these elements must be organized in a model describing the influence process and variables as an interrelated system.

Table 3

Importance and Frequency of Transition Team Advisor Behaviors

| Item | Importance <i>M (SD)</i> | Frequency <i>M (SD)</i> |
|---|-----------------------------|----------------------------|
| <i>Impression Management Behaviors-</i> | | |
| Establish credibility with counterpart | 4.33 (1.1) | 3.66 (1.3) |
| Demonstrate that the transition team provides something of value | 4.22 (1.1) | 3.61 (1.3) |
| Demonstrate a positive attitude | 4.22 (1.0) | 3.91 (1.2) |
| Exhibit a strong work ethic | 4.21 (1.1) | 3.99 (1.1) |
| Build a close relationship with counterpart | 4.15 (1.2) | 3.45 (1.4) |
| Serve as a role model for counterpart | 4.14 (1.3) | 3.78 (1.3) |
| Recognize when individuals from other culture were trying to manipulate you | 4.14 (1.3) | 3.07 (1.6) |
| Gain trust of individuals from that culture | 3.85 (1.3) | 3.11 (1.5) |
| Spend “unstructured time” with your counterpart | 3.71 (1.4) | 2.91 (1.5) |
| Demonstrate support for counterpart by deferring, promoting, remaining in shadows | 3.58 (1.5) | 2.74 (1.6) |
| Demonstrate enthusiasm of team to counterpart | 3.53 (1.4) | 2.98 (1.5) |
| Employ a rapport plan | 3.21 (1.6) | 2.48 (1.6) |
| <i>Applying Influence Tactics</i> | | |
| <u>Hard Tactics</u> | | |
| Apply pressure tactics | 3.26 (1.6) | 2.31 (1.6) |
| Offer counterpart an item/action in exchange | 2.57 (1.6) | 1.62 (1.4) |
| Use legitimate authority (position, rank...) | 2.52 (1.8) | 1.70 (1.6) |
| <u>Rational Tactics</u> | | |
| Explain to counterpart how compliance will benefit him | 3.38 (1.4) | 2.55 (1.5) |
| Use rational persuasion | 3.38 (1.4) | 2.65 (1.5) |
| <u>Soft Tactics</u> | | |
| Tell counterpart you will collaborate (cooperate, provide resources) | 3.04 (1.6) | 2.18 (1.5) |
| Let counterpart participate in transition team activities/decisions | 2.69 (1.7) | 1.81 (1.6) |
| Use personal appeal (ask to comply out of loyalty or friendship) | 2.62 (1.7) | 1.85 (1.6) |
| Appeal to the emotions (inspirational) | 2.55 (.1.6) | 1.83 (1.5) |

Note. Importance Rating Scale: 5—Extremely important, 4—Very important, 3—Moderately important, 2—Some importance, 1—Little importance, 0—None. Frequency Rating Scale: 5—More than once a day, 4—Once a day, 3—Once a week, 2—Once a month, 1—A few times, 0—Did not perform.

Some researchers provided models of interrelationships for portions of the influence process (e.g., Yukl, 2006). The most extensive model of influence was proposed by Mueller-Hanson et al. (2007) and focused on understanding the in-the-moment social awareness processes during influence (Figure 1). The first three boxes of the Mueller-Hanson et al. model depict the influencer's goal, the influencer's evaluation of the situation, and the influencer's selection of an influence strategy. The boxes capture each of the seven key variables, although multiple variables fit within the label "evaluation of the situation" - this encompasses the bases of power, characteristics of the target, message, context, and influencer/source. The next steps in the model are for the influencer to select and apply an influence strategy, at which point the in-the-moment social awareness process begins. A more detailed description of the in-the-moment social awareness process can be found in Mueller-Hanson et al. (2007).

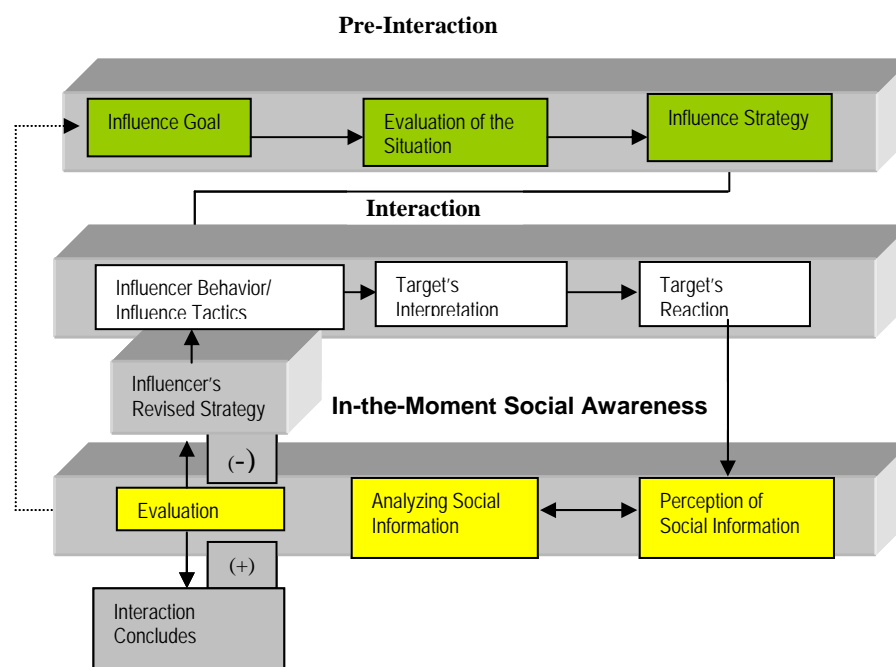


Figure 1. A model of social awareness and influence (Mueller-Hanson et al., 2007)

While Mueller-Hanson's et al. (2007) model focuses specifically on in-the-moment social awareness and how it pertained to influence, the influence model generated in that research can be adapted to address the leader influence process more broadly. A proposed model for applying leader influence strategies can be seen in Figure 2.

As indicated in prior research, influence outcomes can be classified into three categories: compliance, commitment, and resistance. Identifying the importance of commitment over compliance in a given influence situation is a critical first decision in the influence process. The next step is to evaluate key situational variables. Situational factors include situation criticality, target characteristics such as resistance, the leader-target relationship, and characteristics of the

influencer. One of characteristics of the influencer that can play an important role in the success of an influence attempt is the bases of power available to the influencer. However, as discussed previously in the report, an influencer's foundation or capability to influence may include additional sources beyond traditional bases of power; success in influence also may depend on social capital or landscaping. These multiple sources that enhance a leader's capability to influence can be referred to collectively as *Influence Capital*. While the literature has focused specifically on how a leader builds referent power (e.g., building rapport, building relationships), or expert power (e.g., creating a perception of competence), it is useful for a leader to take inventory of each base of power available and his/her influence capital stemming from those bases of power, as well as the extent to which that power base can be amplified. In essence, influence capital is the sum of the capabilities and characteristics that an individual holds that enables him/her to apply different influence strategies effectively.

According to Mueller-Hanson et al.'s (2007) model, once the leader determines the goal of influence and evaluates the situation, the next steps are to select an influence strategy, apply the influence strategy, and then evaluate whether the desired outcome was achieved. The influence strategy might consist of a single proactive influence tactic or a set of tactics and impression management techniques. If the goal was not achieved by the strategy, the feedback loop returns to re-evaluate the situational variables, and even if the outcome is achieved, a feedback loop monitors the effects of the influence process on the leader's store of influence capital. For example, if pressure tactics are applied, that may have achieved an outcome of compliance which is sufficient; however, negative reactance from the target may reduce the leader's referent power and thereby reduce his/her influence capital for future influence episodes.

Applying Influence – A Process Model

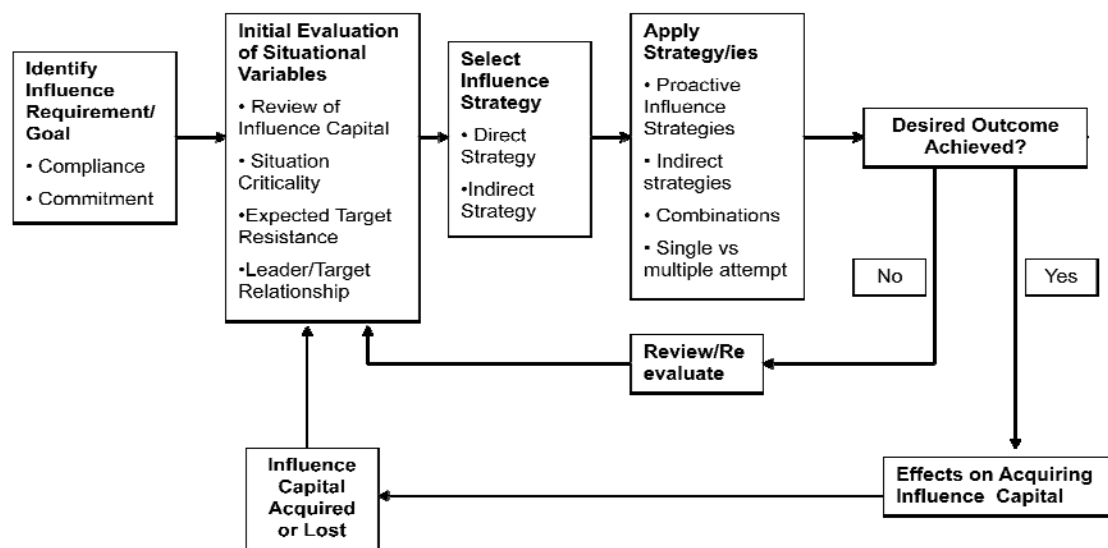


Figure 2. A process model for applying influence

In considering the findings from Ramsden Zbylut et al. (2009) and statements of others (e.g., Cialdini, 2007; Pratkanis, 2007; U.S. Army, 2006; Yukl, 2006) regarding the importance of indirect influence methods such as building rapport and building perceptions of competence, the influence capital concept is an element of particular importance in the model. While the concept of building rapport to increase referent power is not new (e.g., see Yukl, 2006), little attention is paid to building the other bases of power. Given the criticality of these power bases to the application of influence tactics, it is worthwhile to develop a better understanding of the process that can be used to build or acquire influence capital. A preliminary concept for understanding how influence capital is acquired can be seen in Figure 3. While the acquiring influence capital model presents a simple concept, it is nevertheless a concept that is not currently applied as such in leader influence training.

As shown in Figure 3, the first step of the process involves evaluating the influence situation. Specifically, the leader evaluates his/her bases of power, and considers whether any power bases need to be strengthened. Evaluation can be done at milestone points, such as the start of a new job or mission or performance evaluation, or can be in response to an influence problem that needs to be solved. The process of what is considered and how decisions are made regarding which power areas to increase is a topic that requires research to define further. As an example, a Company is heading to Afghanistan with his Battalion. The Company Commander considers his specific mission and who he will need to be influencing (e.g., host nationals, other services, NGOs), considers his bases of power vis-a-vis the various influence targets, identifies power bases he would like to grow, and determines a strategy to build them. As another example, a Commander has had a number of DUIs in his unit and wants to eliminate them. He reviews his bases of power and rather than using coercive power, would like to use ecological power to combat the problems; that is, he wants to build a unit climate that prevents DUIs. His next step is to determine a strategy to build his ecological base of power – to build a climate that influences his subordinates to avoid DUIs. He then plans specific tactics to build a climate (e.g. writing a memo, holding a town hall meeting, sending an email), applies the tactics, then evaluates whether his desired outcome was achieved.

The models in Figures 2 and 3 assemble the key variables that affect influence outcomes; however, empirical work must be done to better capture the situational evaluation process as well as other cognitive processes present in the models. Nevertheless, these models are helpful in describing how different elements from the literature form an overall framework. Additionally, the model is useful in helping identify KSAOs that affect an individual's influence performance.

KSAOs Supporting Influence Behavior

While the first section of the report reviewed influence strategies and influence performance, this section explores the knowledge, skills, abilities, and other characteristics (KSAOs) related to influence performance. Understanding these KSAOs provides a critical foundation for selecting and training leaders to influence effectively. Specifically, trainers and curriculum designers interested in improving leader influence may choose to develop training or instruction that address one or more of the skills and knowledge areas outlined in this report.

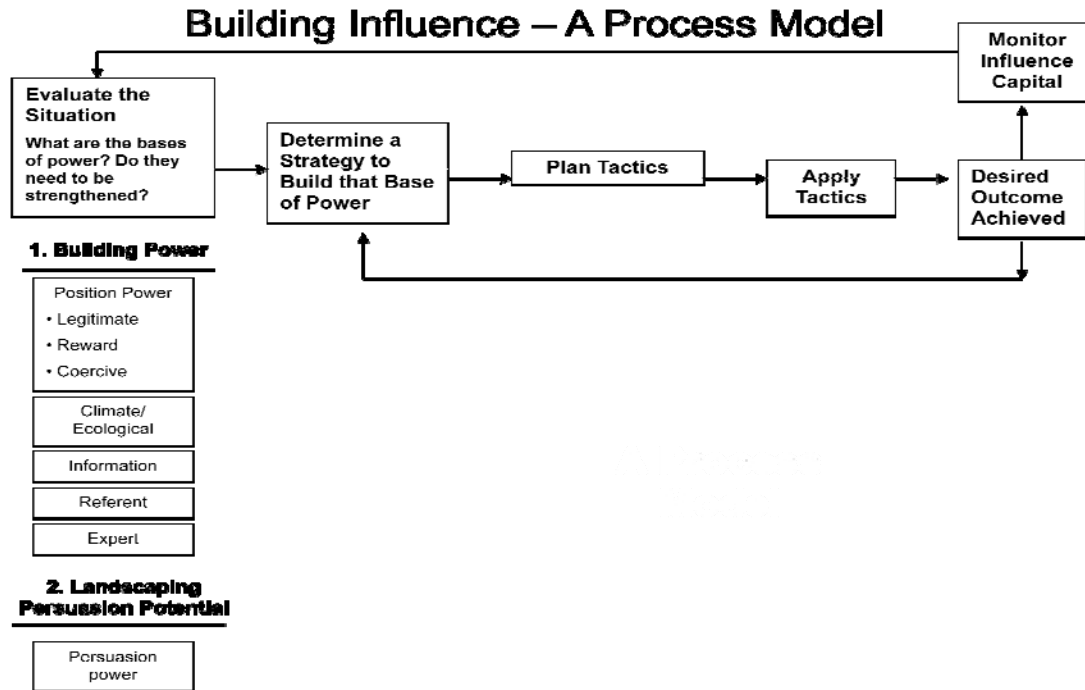


Figure 3. A process model for building influence

Framework of Influence KSAOs

Because a large number of KSAOs emerged from the literature review, a framework was needed to organize the different types of KSAOs (see Figure 4). Campbell's (1990; Campbell, McCloy, Oppler, & Sager, 1993) model of job performance and its direct and indirect antecedents (e.g., Johnson, 2003; Motowidlo, Borman, & Schmitt, 1997) was identified as a framework that could be applied to the influence performance domain. Consistent with Campbell's description of the performance domain, influence performance refers to the influence strategies or influence behaviors performed (e.g., using rational persuasion to persuade a target to engage in a course of action) rather than the outcomes of the behaviors (i.e., whether or not the influence attempt was successful).

A key tenet of Campbell's approach is that performance is directly determined by three things: (a) declarative knowledge (i.e., factual knowledge about specific things); (b) procedural knowledge/skill (i.e., the degree to which one is actually able to perform a task); and (c) motivation (i.e., the combined effect of the choice to expend effort, the choice of the level of effort to expend, and the choice to persist at that level of effort). These direct performance determinants are distinguished from indirect performance determinants in Campbell's model. Indirect performance determinants can only influence performance through direct determinants. Examples of indirect performance determinants are abilities, personality, and experience. Typically, direct performance determinants are considered proximal and indirect performance determinants are considered distal. Campbell's framework was expanded to include a set of

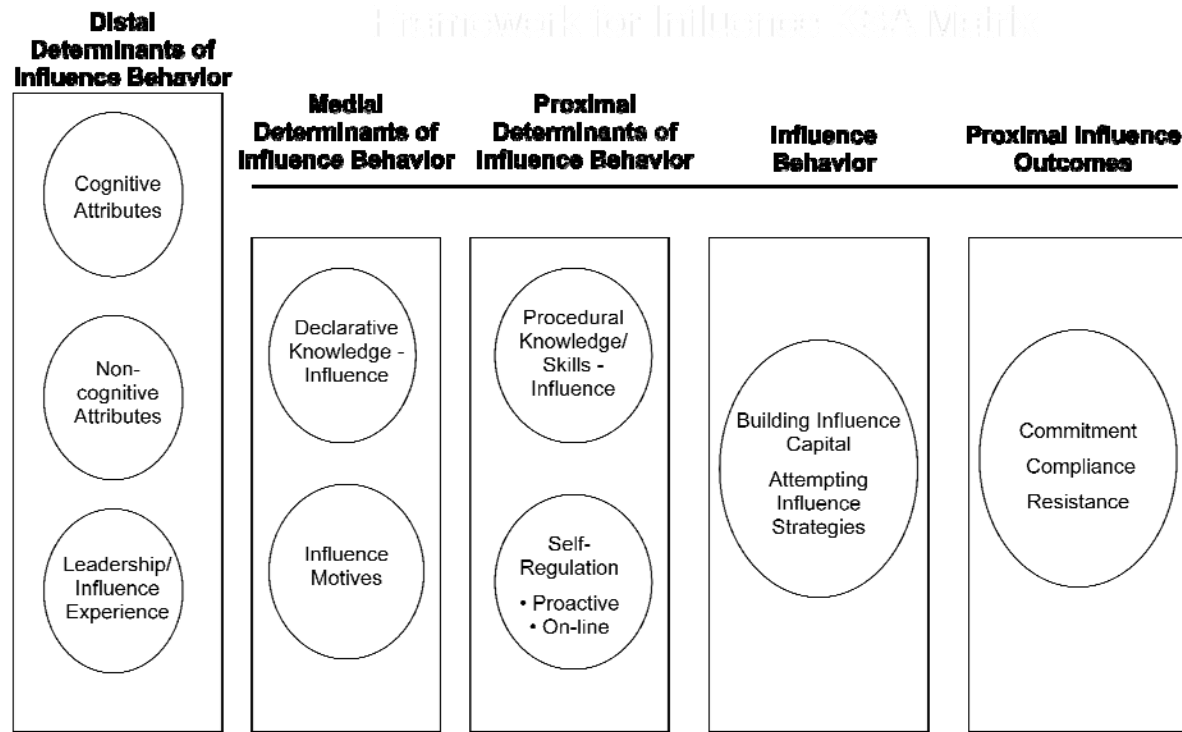


Figure 4. Framework of variables relevant to the leadership influence strategies and tactics. Presenting a detailed theory of the determinants of leadership influence strategies and tactics, wherein hypotheses about mediation, moderation, and distance from the criterion space are precisely specified, is beyond the scope of this research. Thus, arrows have not been drawn to indicate the relationships between the different KSAOs. Instead, the framework is intended to provide a general categorization of different types of KSAOs consistent with other well-known performance frameworks found in the scientific literature.

variables labeled “medial” that fall between proximal and distal. As such, there are two sets of indirect performance determinants, with one set more distal to performance than the other.

Influence behavior. In the framework shown in Figure 4, influence behavior is essentially the *job performance* domain. Influence behavior may be regarded as *performance* because it refers to behaviors that an individual performs during work and are under the control of that individual. As such, influence behavior in the framework includes building influence capital and attempting influence strategies as the two meta-dimensions revealed in the literature review. The two dimensions include specific influence strategies and tactics, as well as other related leadership competencies that facilitate the strategies involved in building influence capital and attempting influence strategies. Also included is a set of leadership styles prominent in the literature and relevant to influence strategies.

Because information from the literature review was subsequently used to develop a self-report measure of attempting influence (see Foldes, Schneider, Wisecarver, & Ramsden Zbylut, in preparation), it was necessary to reduce the number of direct strategies/tactics to achieve a reasonable number to measure. We therefore created an abbreviated list of strategies and tactics by (a) eliminating redundant strategies/tactics; (b) integrating highly related strategies/tactics; (c) independently sorting the remaining strategies/tactics into relatively homogeneous groups; (d) comparing, discussing, and resolving disagreements to arrive at a consensus regarding the hierarchical structure; and (e) creating definitions for the higher-order strategies/tactics. The complete lists of strategies/tactics and relevant leadership competencies, together with their definitions, are in Appendix A. The abbreviated list of 13 influence strategies/tactics used as a basis for the self-report measure is shown in Table 4.

Leadership styles. Leadership styles are profiles of leadership behavior that represent different ways of leading followers. They have been studied both as predictors and criteria, though in the present context they are of interest as predictors of leadership influence strategies and tactics. Table 5 presents leadership styles relevant to influence strategies/tactics.

Transformational leadership theories emphasize the charismatic, inspiring behaviors of leaders that elicit enthusiasm and motivation among followers (Bass, 1985). Transformational leaders use inspirational influence tactics to obtain support from others. Judge and Bono (2000) conducted a meta-analysis that examined the relationship between transformational leadership and various criteria of interest to organizations and researchers. Results suggested that leaders rated by their subordinates as transformational were more satisfying and motivating to their subordinates, likely to have subordinates who were committed to their organizations, and likely to be rated by their supervisors as effective leaders. In another meta-analysis, Judge and Piccolo (2004) linked transformational leadership to a variety of positive organizational outcomes, such as follower motivation, group and organizational performance, and leader effectiveness.

Table 4
Integrated List of Direct Influence Tactics

| Influence Tactic | Definition | Examples | Tactic from the literature |
|------------------------------------|---|--|--|
| Use an Indirect Approach | Asking an individual to comply with a request in an indirect manner. | Hinting to an individual to do something. | Indirect Request |
| Appeal to Duty and/or Morality | Appealing to an individual's conscience and desire to do the right thing. | Telling someone (a) it is his duty, (b) it is the right thing to do, (c) failure to do this would go against most people's sense of morality, or (d) failure to do this would go against core Army values. | Duty; Moral principle-based appeal; Norm-based appeal |
| Provide Inspiration | Arousing enthusiasm by appealing to an individual's values, ideals, and aspirations. | Telling someone (a) doing this will help them move closer to meeting a personal and/or professional goal; (b) doing this will make them feel good because it is an act of patriotism, selflessness (or is consistent with other things they need or value); or (c) doing this is important and useful work because [give reason] | Inspirational Appeal |
| Use Rank and Authority | Exercising the power of authority associated with a particular rank or position as a means of persuasion. | (a) Issuing an order for a subordinate to execute an assignment, (b) using position to gain the support of top brass who will be watching closely, or (c) using position as a United States military officer to persuade a host-national to do something. | Use of Role Relationship with Target; Legitimizing |
| Use Pressure, Threats, or Warnings | Conveying the possible negative consequences associated with non-compliance. | (a) Threatening to prevent them from accomplishing another goal to which they are committed; (b) penalizing them for not doing something; (c) adopting a rejecting attitude toward them until they comply; or (d) explaining why they will feel worse about themselves if they do not comply. | Pressure; Threat; Coercion; Warnings; Aversive Stimulation; Personal Rejection; Blocking; Expertise (negative) |
| Explain the Benefits of Compliance | Communicating why complying with a request will result in positive outcomes using logic and facts. | (a) Using logical arguments and factual evidence to persuade the individual; (b) explaining that people they respect will think well of them if they comply; (c) explaining why they will feel better about themselves if they comply; (d) explaining why complying is obviously the right choice; (e) providing information that the suggested course of action is clearly better than one the target might be considering. | Justification for Action; Rational Persuasion; Expertise-Based appeal; Rational appeal; Apprising |
| Work/Consult with Others | Encouraging cooperation by working with others in a respectful and constructive manner. | (a) Offering to negotiate, compromise, or provide assistance/resources; and (b) soliciting input. | Consultation; Collaboration; Egalitarian Approach; Cooperation |

Table 4 (continued)

| Influence Tactic | Definition | Examples | Tactic from the literature |
|---|---|---|--|
| Establish Rapport/Create Positive Feelings | Encouraging cooperation by generating good feelings before making a request. | (a) Saying something positive before making a request; (b) establishing and maintaining good rapport to facilitate a working relationship that makes influence easier; and (c) communicating understanding of other's point of view before making a request. | Ingratiation; Flattery-Based appeal; Manipulative Positive Behavior; Deception-Based appeal; Empathetic Understanding; Altercasting (Positive) |
| Pair Requests Strategically to Enhance Compliance | Starting with an initial request that makes subsequent compliance more likely. | (a) Getting compliance with a small request, followed by a bigger request (foot-in-the-door); and (b) beginning with an unreasonable request, followed by a more reasonable request -- e.g., asking a fellow officer to use of one of her platoons for a month, followed by a request to use the platoon for only a few days. | Foot-in-the-Door; Consistency |
| Propose a Mutually Beneficial Exchange | Offering a reward, favor, or concession in exchange for complying with a request. | (a) Promising a subordinate officer a desired educational opportunity in return for volunteering for a dangerous assignment while deployed; (b) offering to exchange needed resources with another officer; (c) providing a service to the individual before making a request. | Exchange (Offer); Use of Personal Indebtedness; Pre-Giving/Gifting; Debt; Door-in-the-face |
| Draw on Friendship and/or Loyalty | Appealing to an individual's sense of loyalty or friendship prior to making a request. | (a) Referring to length of relationship as part of making a request; (b) gaining cooperation or commitment by mentioning the loyalty associated with friendship. | Personal appeal; Pressure (Positive); Disclaimer |
| Form a Coalition or Leverage others' Support | Using the involvement or support of others to get someone to comply with a request. | (a) building a coalition before making a request, (b) pointing out that respected others have also complied with the request, (c) getting someone who the target respects to make the request, or (d) pointing out that many people have already agreed to a request similar. | Coalition; Social Validation; Modeling by Valued Others; Extended Expertise; Appeal to Higher Authority |
| Use of Negative Emotion | Demonstrating an emotion such as anger, fear, or sadness to get someone to comply with a request. | Leader uses emotion to elicit target's cooperation (e.g., shows frustration, anger). | Emotion-Based appeal; Criticism-Based appeal; Negative Self-Feeling; Altercasting (Negative) |

Table 5

Leadership Styles and Definitions

| Leadership Style | Definition |
|------------------------|---|
| Transformational | The process of influencing major changes in the attitudes and assumptions of organization members and building commitment for major changes in the organization's objectives and strategies. There are four components of transformational leadership: <i>idealized influence</i> (serving as a charismatic role model), <i>inspirational motivation</i> (articulating a clear, appealing, and inspiring vision to followers), <i>intellectual stimulation</i> (stimulating follower creativity by questioning assumptions and challenging the status quo), and <i>individual consideration</i> (attending to and supporting the individual needs of followers). |
| Transactional | A contingent reinforcement leadership style, whereby leader and followers agree on what followers are required to do to be rewarded or to avoid punishment. If followers do as required, the leader rewards the followers or does not impose aversive reinforcement such as correction, reproof, penalization, or withdrawal of authorization to continue with an assignment or project. |
| Leader-Member Exchange | A dyadic variable characterizing leaders' development of unique relationships with subordinates. Low quality LMX relationships involve exchanges basic to the employment contract, and tend to be impersonal and transactional in nature. High quality LMX relationships involve mutual exchanges that go beyond those fundamental to the employment contract. They are characterized by loyalty, emotional support, mutual trust, and liking, and giving members negotiating latitude. |
| Destructive | The sustained display of: (a) verbal and/or nonverbal behavior that undermines or sabotages an organization's goals, tasks, resources, and effectiveness; and/or (b) the motivation, well-being, or job satisfaction of subordinates. |

Transformational leadership should facilitate use of leadership influence strategy/tactics. Not only should it help build influence capital, as the correlation with follower satisfaction reported by Judge and Piccolo (2004) suggests, but it should also relate to the successful application of that influence capital. For example, inspirational motivation is likely related to the use of the proactive influence strategy inspirational appeals. Similarly, individual consideration may be related to use of personal appeals, which involves drawing on friendship and/or loyalty to enhance the likelihood that followers will perform actions requested by the leader (personal appeals).

Transactional leadership consists of three dimensions: (a) contingent reward, (b) management by exception—active, and (c) management by exception—passive (e.g., Bass, Avolio, Jung, & Berson, 2003). *Contingent reward* is the extent to which the leader sets up productive transactions or exchanges with followers. The leader makes sure that followers know

what is expected of them and provides rewards for meeting those expectations. *Management by exception* is the extent to which the leader monitors and corrects mistakes made by followers. Whether management by exception is active or passive is a function of when the leader intervenes to correct mistakes. "Active leaders monitor follower behavior, anticipate problems, and take corrective actions before the behavior creates serious difficulties. Passive leaders wait until the behavior has created problems before taking action" (Judge & Piccolo, 2004, p. 756). Transactional leadership should be related to influence strategies where mutually beneficial exchanges are proposed, such as exchange. Further, relying on position power and legitimating strategies may well be preferred by leaders who operate using management by exception (active). Leaders who are more passive in their leadership style may not be observed to engage in many attempts at influence at all.

Destructive leadership (Einarsen, Aasland, & Skogstad, 2007; Tepper, 2000, 2007) may involve physical or verbal aggression, active or passive aggression, and direct or indirect aggression. There is no assumption of intent to cause harm; these negative outcomes can result from thoughtlessness, insensitivity, or lack of competence. Destructive leadership includes the "laissez-faire" leadership style, a leadership style where the leader more or less abdicates his or her responsibilities and duties, thereby "stealing time" (Einarsen et al., 2007; Skogstad, Einarsen, Torsheim, Aasland, & Hetland, 2007). Laissez-faire leadership would likely undermine the motivation, well-being, and job satisfaction of subordinates by failing to meet their legitimate expectations of guidance and support. Tepper (2000) found that abusive supervision correlated negatively with interactional, procedural, and distributive justice; job satisfaction; continuance, normative, and affective commitment; work-family conflict; and emotional exhaustion, anxiety, and depression. This type of destructive supervision should certainly squander influence capital. It is likely that individuals who use this leadership style will rely more heavily on strategies such as pressure and legitimating to coerce or threaten others into compliance. It is also possible that a subset of these individuals will simply not engage in influence attempts due to their laissez-faire approach to leadership. Lastly, it is hard to imagine destructive leaders as ones who pay much heed to the potential benefits of impression management activities.

Leader-member exchange (LMX) is a dyadic construct describing relationships that leaders develop with their subordinates (Graen & Uhl-Bien, 1995). The quality of these relationships affects important leader and member attitudes and behaviors. Interactions in high-quality LMX relationships are characterized by loyalty, emotional support, mutual trust, liking, and giving subordinates greater negotiation latitude. Interactions in low-quality LMX relationships are more impersonal and transactional in nature, and they rely on basic, contractual exchanges between both parties. Furst and Cable (2008) explored the relationship between hard influence tactics (sanctions and legitimization) and soft influence tactics (ingratiation and consultation) and LMX, and they found that the effectiveness of those tactics depends on the strength of LMX. For example, when employees experience high levels of LMX, the use of ingratiation tactics is related to lower resistance to requests from the leader, but for employees in low LMX relationships ingratiation was associated with greater resistance to requests. Sparrowe, Soetjito, and Kraimer (2006) report findings in support of a similar role for LMX quality in moderating the relationship between influence tactics and subordinates' helping behavior.

Influence outcomes. The three primary influence outcomes of commitment, compliance, and resistance (Yukl, 2006) were added to the influence framework because of their importance in the literature, their differing implications for strategy/tactic selection, and their differing implications for follow-up behavior.

Proximal determinants of influence behavior. In the influence framework, proximal performance determinants are closest to performing influence behaviors. In Campbell's theory, proximal determinants are direct, unmediated determinants of influence behavior. The proximal determinants in the framework are procedural knowledge/skills and self-regulation.

Procedural knowledge/skills. Procedural knowledge/skills reflect the degree to which one is able to perform a task. Performance is achieved when knowing what to do is combined with knowing how to do it. In the influence context a task may be non-technical, such as engaging in an interpersonal interaction. Procedural knowledge/skills relevant to influence strategies/tactics, along with their definitions, are shown in Table 6.

Many of the procedural knowledge/skills are broad, and they have been broken into facets based on how they have been conceptualized in the literature and to facilitate measurement and understanding. Most of the KSAOs in the procedural knowledge and skills domain relate in some way to the knowledge and skill manifestations of aspects of social, emotional, and practical intelligence (Hedlund & Sternberg, 2000). The following paragraphs summarize the literature that supports linkages between the procedural knowledge and skills and effective use of influence strategies and tactics.

Behavioral flexibility is one of two key attributes identified by Zaccaro, Gilbert, Thor, and Mumford (1991) as encompassing social intelligence, which they, in turn, believed to be a critical quality of effective organizational leaders. They defined behavioral flexibility as “the ability and willingness to respond in significantly different ways to correspondingly different situational requirements” (p. 322). Behavioral flexibility includes the ability to respond well to very different situational demands, referred to as “functional flexibility” by Paulhus and Martin (1988).

Zaccaro, Mumford, Connelly, Marks, and Gilbert (2000) provided evidence linking social problem-solving skills to effective leadership. Participants were 1,807 Army officers serving in leadership roles, ranging in rank from O-1 to O-6. Zaccaro et al. found that social judgment, solution construction, and complex problem-solving were related to both Officer Career Achievement and Senior Officer Career Achievement. Thus, a link appears to exist between social problem solving and leadership criteria. If influence situations are viewed as social problems, then individuals with effective social problem-solving skills are likely better able to assess situational dynamics and identify the best solutions (i.e., effective and appropriate influence strategies).

Metacognition is a term that refers to the knowledge of and control one has of one's own thinking (Flavell, 1979). Knowledge of thinking refers to what one knows about oneself and the cognitive strategies one may use in performing a given task (Veenman, Kok, & Blöte, 2005). Meta-cognition is reflected in activities that demonstrate control over the thinking process, which include planning, monitoring, and evaluation (Keith & Frese, 2005; Veenman et al., 2005).

Table 6
Procedural Knowledge/Skills and Definitions

| Procedural Knowledge/Skill | Definition |
|--|--|
| Behavioral Flexibility | The ability to adjust one's behavior to the interpersonal demands of a wide range of situations. Requires a large behavioral repertoire and appropriate/competent execution of the required behaviors despite differing situational demands. |
| Situational Awareness | The perception of elements in a dynamic environment (i.e., encompassing both space and time), the comprehension of the meaning of those elements, and the projection of their probable status in the near future. |
| Political Skill | The ability to effectively understand others at work, and to use that knowledge to influence others to act in ways that further one's personal and/or organizational objectives. Politically skilled individuals not only know precisely what to do in different social situations at work, but how to do it in a disarmingly charming, genuine, and engaging manner that inspires confidence and trust. |
| Perspective Taking | Discerning, intuiting, analyzing, and taking into account another person's thoughts, feelings, attitudes, interests, concerns, or point of view in a given situation; the ability and proclivity to shift perspectives—to step “outside the self”—when interacting with others; also includes taking a different cultural frame of reference into consideration. |
| Frame Changing | Switching from one frame of reference to another, where each frame is based on a different culture or perspective, to effectively interpret environmental cues. |
| Metacognitive Skill | Regulation and monitoring the application of cognitive skills by (a) formulating an understanding of problems and their critical parameters; (b) promoting the search for and specification of effective solutions; and (c) monitoring solution implementation, generating feedback regarding such implementation, and adapting solutions to changing conditions. |
| Emotional Intelligence (ability model approach) | The accurate processing of emotion-relevant information (e.g., facial expressions) and the ability to use emotions in reasoning to solve problems. Emotional intelligence is comprised of four abilities: (a) ability to perceive emotion, (b) use of emotion in cognitive activities, (c) understanding emotion, and (d) managing emotion in self and others. |
| Emotional Awareness | General skill in receiving and decoding the nonverbal communication of others. Individuals high in emotional awareness are concerned with and vigilant in observing the nonverbal emotional cues of others. |

Table 6 (continued)

| Procedural Knowledge/Skill | Definition |
|--|---|
| Cultural Intelligence | The ability to interact effectively with people in different cultures. Includes possessing (a) the necessary repertoire of behaviors to succeed in a new culture, including the ability to express verbal and nonverbal behaviors appropriate to a given culture; (b) self-efficacy with respect to one's ability to succeed in a new culture; (c) a flexible self-concept into which information about a culture can be incorporated (especially when inconsistent with one's current self-concept); (d) metacognitive abilities needed to acquire knowledge required for success in a new culture; (e) the ability to identify tacit social knowledge relevant to a new culture and to make sense of behaviors inconsistent with social rules and norms of other cultures with which one is familiar; (f) values that are not strongly inconsistent with those of a new culture; (g) the ability to quickly acquire knowledge of the language, values, customary behavior, ideas, beliefs, and patterns of thinking that influence others in a given culture. |
| Social Problem-Solving Skills | The ability to determine the causes of, and resolve, problematic social scenarios; the ability to identify social errors. |
| Social Metacognition | The ability to impose structure on complex, ill-defined social problems while considering available resources and constraints. Includes identifying information needed to understand the nature of social problems and issues that need to be considered to generate viable solutions. |
| Conflict Management | The ability to confront and reduce or eliminate conflict without giving in to demands that would undermine one's influence goals; the ability to preserve good relationships and trust between participants after conflict episodes have concluded. |
| Oral Communication Skills | The ability to (a) speak clearly and understandably; (b) express oneself well in groups and in one-on-one conversations; (c) use vocal inflection to enhance target interest; (d) use a tone of voice appropriate to one's influence goals (e.g., strong and commanding when short-term compliance is required, softer and more pleasant when asking a favor of one's superior). |
| Listening Skill | Attends to and conveys understanding of the comments and questions of others; listens well in a group. |
| Tacit Knowledge Relevant to Influencing Others | Knowledge usually acquired unconsciously about how to act in specific influence-related situations that is not readily articulated or widely shared. Tacit knowledge is generally acquired on one's own, guides an individual's action in particular situations or classes of situations, and has practical value to the individual. It is experience-based, action-oriented, and instrumental to achievement of one's influence goals. |

Metacognition seems to be critical to the planning and implementation of leadership influence strategies and tactics. Knowledge of what strategies and tactics one is best at, and monitoring the success of those strategies and tactics during influence attempts, both of which are facets of metacognition, are important aspects of influence. A critical aspect of the planning facet of metacognition may involve sequencing of actions and strategies for maximum effectiveness.

Metacognitive skill also involves understanding and monitoring social dynamics within the social problem-solving domain. For example, leadership-related solution construction skills, as operationalized by Zaccaro et al. (2000), appear to be more metacognitive than cognitive in nature. We therefore decided to create a new variable called “social metacognition.” Given that one cannot assume equivalence between cognition and social cognition, and in the absence of any contrary evidence, it made sense to conceptualize social metacognition as a distinct variable rather than as a facet of metacognition.

Political skill (e.g., Ferris et al., 2005; Harris, Zivnuska, Kacmar, & Shaw, 2007) is another broad skill relevant to the leadership effectiveness domain. Politically skilled individuals are adept at developing and utilizing social networks and often are viewed as adroit negotiators and brokers of compromise. Blass and Ferris (2007) noted politics are viewed negatively within the military as signifying careerism. The negative view of political skill suggests individuals get ahead based on non-performance-based means. Blass and Ferris, however, proposed that politically skilled individuals will be better equipped to deal with the uncertainty of future leadership challenges than those without political skills. Moreover, organizational politics are simply part of the fabric of work organizations, including the Army. Possessing political skills would therefore seem to be essential to effective leadership, particularly with regard to the formulation and implementation of effective influence strategies and tactics. Knowing which influence attempts are appropriate and effective in different situations is an important manifestation of political skill in organizations. Political skills may be especially useful when an influence attempt is made laterally and the influencer cannot rely on position power and authority. In such cases, politically skilled individuals are adept at assessing people and situations, leveraging different bases of power, and identifying tactics likely to assure desired outcomes.

Situational awareness (Endsley, 1995; Johnsen, Brun, Nyhus, & Larsson, 2004) is less interpersonal than other procedural knowledge and skills underlying influence behavior, but it is an important attribute for successful implementation of leadership strategies and tactics. Specifically, to respond effectively in a dynamic environment, it is necessary to maintain awareness of the elements in the environment, interpret their meaning, incorporate that information into an existing domain-specific knowledge framework, and predict how the situation will change. While situational awareness could involve awareness of *things* rather than *people*, it seems that an effective leader should be situationally aware, given that most leadership situations involve individuals interacting dynamically with each other. For example, it may be that knowledge of the situation helps a leader to identify that there is a need or reason to engage in an influence attempt. Additionally, knowledge of the situation might help one choose one influence strategy over another (e.g., to get compliance versus commitment). Lastly, knowledge of the situation would include knowledge about one’s social capital and bases of power and how best to leverage them to achieve a desired outcome.

Several skills specifically related to communication are included in the procedural knowledge/skill domain; specifically, emotional awareness (R. E. Riggio, 1986), oral communication skill, and conflict management skill (e.g., Bowden, Laux, Keenan, & Knapp, 2003). Listening skills are essential in that monitoring the success of an influence attempt requires a leader to be attentive to a target's responses. Oral communication skills are important in that communication will be facilitated by the ability to communicate orally, especially if more nuanced strategies are required, as will often be the case in acquiring and applying influence strategies and tactics. Skill in managing conflict (e.g., Bowden et al., 2003) is also important to success in implementing strategies and tactics. For example, it is difficult to influence a team to attain a goal if its members are constantly at odds.

Cultural intelligence (Department of the Army, 2006; Earley & Ang, 2003; Earley & Peterson, 2004; Thomas, 2006; Wong, Gerras, Kidd, Pricone, & Swengros, 2003) is an emerging KSAO that holds promise for helping leaders be effective in dealing with host-nationals and other members of foreign countries to which they are deployed. Cultural factors are pervasive in current full spectrum operations, and acquiring cultural knowledge for these operations remains a challenge (Abbe & Halpin, 2010). Cultural intelligence is a broad concept that is difficult to operationalize. Not only does it include many distinct facets, but it is partly context-specific in that it encompasses knowledge of specific norms and practices of a given culture (Thomas, 2006). Its partly context-specific nature would necessitate different measurement from culture to culture (and, for that matter, from subculture to subculture within a given culture). That said, if a large number of officers are deployed to a small number of specific cultures, the measurement task becomes somewhat less difficult. One interesting facet of cultural intelligence, behavior matching, involves the synchronization of nonverbal and paraverbal behavior to fit that of an interaction partner. Hatfield, Cacioppo, and Rapson (1994) argued that this sort of "behavioral mimicry" leads to emotional convergence between interaction partners, resulting in greater liking and rapport. Similarly, Ramsden Zbylut et al. (2009) found that for the job of Army security force advisor, perspective taking, cultural awareness, and demonstrating consideration and respect were important relationship building behaviors. Furthermore, these variables were more strongly related to acceptance by the counterpart than one's declarative knowledge of a culture. To the extent that cultural intelligence facilitates relationships between individuals, cultural intelligence might provide the influencer with a stronger basis of power than he or she might otherwise have.

Finally, acquisition of tacit knowledge is likely critical to the leadership influence strategies domain. According to Kellermann (1992), much complex knowledge acquisition, including acquisition of knowledge of strategic behaviors, is acquired implicitly (i.e., outside of conscious awareness). Influence strategies, which are a subset of the strategic behavior domain, would therefore seem to fall within the domain of implicitly acquired knowledge, except where skilled mentors and trainers can circumvent and thereby accelerate the process. For example,

"[t]he most effective form of recognition and reward... may depend on the nature of the work, what resources are available, and the personalities of the individuals the leader is trying to motivate. This type of knowledge is... largely acquired through experience about how to act in specific situations, but that is not readily articulated or widely shared" (Hedlund et al., 2003, p. 118).

Hedlund et al. (2003) developed a tacit knowledge test for military leaders. Items were developed at the platoon, company, and battalion levels. To examine the test's validity, leadership effectiveness ratings were provided by superior officers using single-item measures of each leader's interpersonal, task-oriented, and overall effectiveness. Results showed moderate validity of the test for both platoon leaders and company commanders. For battalion commanders, tacit knowledge correlated even better with supervisor ratings. Participants were also given a tacit knowledge test developed for managers in the civilian sector, which correlated moderately with the military leadership tacit knowledge test, providing evidence for the domain specificity of tacit knowledge.

Self-regulation. Self-regulation encompasses both proactive processes and online processes. *Proactive processes* occur before a task is commenced, and reflect cognitions about expectations for achieving a goal or the value of outcomes resulting from achieving a goal. During this phase, people determine what course of action to take, resulting in the formation of an intention. Expectancy, self-efficacy, and goal setting all fall within the proactive category of motivation processes. Leadership self-efficacy is likely one relevant proactive process that will predict the influence strategies adopted by leaders. Leadership self-efficacy refers to the "perceived capabilities of the individual to perform functions necessary to accomplish specific leadership roles effectively" (Ng, Ang, & Chan, 2008, p. 734). Ng. et al. reported a correlation between leadership self-efficacy and leader effectiveness, based on supervisor ratings of task, conceptual, and interpersonal aspects of leadership. Having self-efficacy for achieving a goal makes it more likely that an individual will be successful at achieving a desired influence outcome through both the selection of effective influence strategies and the effort invested in applying those strategies. For example, the self-perceived capability to influence others could motivate a leader to try a wider range of influence strategies than might otherwise be the case. Further, this capability can then translate into confident behavior that elicits action from others. More broadly, self-efficacy may contribute to building certain kinds of influence capital, such as expert power.

On-line processes occur while working on a task, and are characterized by self-regulatory processes necessary to maintain goal-directed action. Emotion control and/or regulation (e.g., Gross, & John, 2003; R. E. Riggio, 1986) is likely a relevant on-line process and refers to refraining from expressing negative emotions when experiencing them; using strategies to elicit desired emotional states in oneself (e.g., when experiencing negative emotions, reframing the emotion-eliciting situation in a way that reduces its negative emotional impact).

Medial performance determinants. In the influence framework, medial performance determinants fall between distal and proximal performance determinants. That is, they are closer to influence strategy-related behavior than indirect performance determinants, but further from influence strategy-related behavior than proximal performance determinants. The medial performance determinants in the framework are declarative knowledge and influence motives.

Declarative knowledge. Declarative knowledge represents factual knowledge about specific things, or knowing what to do to complete a task. Examples of declarative knowledge include knowledge of labels, facts, principles, goals, and self (Campbell, 1990). Different types of declarative knowledge relevant to leader influence strategies are shown in Table 7.

Table 7
Declarative Knowledge Attributes and Definitions

| Attribute | Definition |
|--|--|
| Social Influence Knowledge | Categorized social information about types of persons, influence-related situations, and influence episodes such that each category is characterized by a prototypical representation. |
| Technical and Tactical Knowledge | Possessing and maintaining tactical and technical knowledge appropriate to rank, branch, function, or system. Understanding military tactics related to securing a designated objective through military means. |
| Joint Organization Knowledge | Understanding joint organizations, their procedures, and their roles in national defense |
| Knowledge of Social Norms | Knowledge of spoken or unspoken social rules that, if not followed, result in some type of sanction. Norms can be violated, for example, as a result of inappropriate verbal behavior (saying the wrong thing), inappropriate non-verbal behavior (not looking someone in the eye when talking to them), or inappropriate physical behavior (weak handshake). |
| Knowledge of Organizational Structures and Systems within the Army | Knowledge required to solve difficult organizational problems and develop individual and organizational solutions to these problems in complex environments. |
| Knowledge of Maladaptive Perceptual Biases | Learned predispositions to selectively notice some things and not others. Interpretive biases are influenced in part by perceptual biases and involve how people categorize (or miscategorize) information (e.g. using stereotypes). Biases can negatively affect what an individual knows, assumes, or perceives he/she knows about the surrounding world. Research on negotiation indicates simplifying the environment can impair negotiator performance. |
| Relevant Geopolitical Awareness/Knowledge | Knowledge of the Army's influence on other countries, multinational partners, and enemies; knowledge of the factors influencing conflict and peacekeeping, peace enforcing, and peacemaking missions. |
| Knowledge of Differences in Core Cultural Values | Knowledge of the differences in cultural values allows leaders to more accurately understand, predict, and express acceptable behaviors in cross-cultural contexts. Knowledge of these differences can lead to different attitudes, which can further influence changes in behavior. |
| Knowledge of Core Cultural Values | Cultural values form the basis for the development of norms. Norms are schemas for what is appropriate behavior in different situations. This type of knowledge leads to different attitudes and more effective influence behavior. |

Declarative knowledge can be categorized into different types of knowledge: technical, cultural, and geopolitical knowledge; social knowledge relevant to influence; and self-knowledge relevant to influence. Generic versions of these types of knowledge are included in Campbell's (1990) declarative knowledge category.

Technical and tactical knowledge should facilitate acquisition of influence capital by enabling officers to lead by example (U.S. Army, 2006, 7-14). The use of impression management tactics can assist in displays of confidence and competence, which are the foundations of leading by example. Indeed, Ramsden Zbylut et al. (2009) reported that two impression management skills were identified by military advisors as most critical to their performance. Specifically, establishing credibility with one's counterpart and serving as a positive role model were found to be highly important to advisor success. Results indicated that these two skills were predictive of advisors' reports of how receptive their counterparts were to their advice and influence. Clearly, it may be easier to establish credibility and serve as a positive role model if one has a store of useful knowledge or expertise upon which to draw.

In principle, possessing technical and tactical knowledge will enhance officers' position power by impressing superiors, resulting in promotions to more powerful leadership positions. It might also be expected that technical and tactical knowledge is related to expertise, which lends itself to building expert power. Technical and tactical knowledge also might help leaders provide better evidence and explanations when using rational persuasion to influence others because leaders presumably would have more knowledge to create a rational argument.

Joint organization knowledge should enable officers to work effectively and influentially with joint, interagency, and multinational forces, building informal teams to accomplish their missions. It enables leaders to extend influence beyond their direct chain of command (U.S. Army, 2006, p.7-11). Extending influence requires awareness of differences in how influence operates, particularly in other cultures. Targets of influence outside the chain of command or from different cultures may not recognize or willingly accept the authority that an Army leader has. In some cases leaders may need to interact as a persuasive force, but do so without an obvious position and attitude of power. At other times, leading without authority requires adaptation to the environment and cultural sensitivities of the given situation. Leaders can greatly benefit from cultural knowledge to understand different social customs and belief systems and to address issues in those contexts (U.S. Army, p. 6-11). As mentioned previously, demonstrating cultural awareness can enhance one's social capital and has implications for the influence strategies that can be applied in a situation. Ramsden Zbylut et al. (2009) found that for military transition teams, having an understanding of one's counterpart was significantly related to all of the influence strategies, with the strongest relationship with Rational Persuasion. Cultural awareness facilitates perspective taking, and if a leader understands another's perspective he or she can better formulate rational persuasion and other influence strategies.

Geopolitical awareness can be important to Army leaders. Knowledge of current events in the operational area and the ability to make sure Soldiers are prepared to deal with indigenous personnel will enhance military effectiveness (U.S. Army, 2006, 6-7). Ramsden Zbylut et al. (2009) found that understanding the operating environment (e.g., using knowledge about geography, religious influences, economic influences) was considered by military advisors to be

moderately to very important to their success. Further, participants in Ramsden Zbylut et al.'s (2009) research indicated that understanding the operational environment was related to building consensus and establishing goals with the counterpart, both of which are related to one's ability to influence.

Inclusion of social influence knowledge as a form of declarative knowledge was based on rational and empirical considerations. Zaccaro et al. (1991) saw social perceptiveness as fundamentally linked to the breadth and depth of encoded declarative knowledge structures. Officers possessing such knowledge structures are, according to Zaccaro et al., able to make more fine-grained distinctions among persons, situations, and social episodes, and to apply that more highly elaborated social information to interpretation of social stimuli. Knowledge about social influence allows officers to more accurately perceive the contingencies of particular organizational situations and plan individual and collective responses accordingly. Empirical support for including social influence knowledge was reported by Schneider and Johnson (2005), who developed a social knowledge test that incorporated influence components. That test correlated with peer ratings of social presence, which has a substantial influence component. Therefore, it appears that knowledge of social information (e.g., people and situations) translates into more effective action. Moreover, this knowledge is likely to help an individual build social capital and influence capital with others, as well as choose influence tactics that are appropriate and likely to lead to a desired outcome.

Social norms represent another kind of declarative knowledge relevant to influence. Social norms are "beliefs that certain referents think the person should or should not perform the behavior in question" (Fishbein & Ajzen, 1972, p. 16). Schneider and Johnson (2005) defined and described social norms as:

Spoken or unspoken social rules that, if not followed, result in some type of sanction; they are the social "dos" and "don'ts" that most everyone can agree on. Norms can be violated, for example, as a result of inappropriate verbal behavior (saying the wrong thing), inappropriate non-verbal behavior (not looking someone in the eye when talking to them), or inappropriate physical behavior (weak handshake). Sanctions for violating social norms can, among other things, take the form of an official reprimand, being snubbed by fellow officers, or losing the respect of those under one's command (p 25).

As a general rule, it is difficult to influence people if one deviates from standards of behavior accepted by the group with which those people identify. However, social norms differ from group to group. Some social norms are Army-wide, others may be specific to a brigade, battalion, or company. Other social norms may be unique to other cultures, and knowledge of such norms would then be instrumental to interacting effectively and influentially with members of those other cultures, whether they are host-nationals or members of other countries in multinational military units.

Awareness of maladaptive biases in the way one thinks about influence-related situations is a valuable form of self-related declarative knowledge. In their monograph on social intelligence, Cantor and Kihlstrom (1987) referred to possessing maladaptive biases as a form of "maladaptive expertise." The idea is that one can have cognitive structures that are adaptive or

maladaptive. Maladaptive expertise must be identified, “dismantled,” and replaced with adaptive expertise and may prevent the acquisition of influence capital. For example, an officer may unknowingly use a harsher tone of voice than is called for when socializing informally with subordinates. By making the officer aware that he or she is using this harsh tone of voice and suggesting a softer tone during informal social activities with subordinates, maladaptive expertise would be replaced with adaptive expertise (a more appropriate tone of voice) that would, in principle, be directly related to the acquisition of influence capital.

Note that some cognitive structures may be adaptive in one context and maladaptive in a different context. In such cases, it is necessary to apply the correct cognitive structure based on understanding of the context. For example, certain types of arguments or influence strategies may be persuasive in the United States, but not in Middle Eastern countries. Before one can become cognitively adaptive, however, one must become aware of one's maladaptive biases. Often, these biases will be unconscious, and an officer must be made aware of them.

Influence motives. Psychological motives refer to reasons for choosing to exert effort in a particular direction. Motives can be values, interests, preferences, or attitudes, among other things. Motives are expected to determine proactive self-regulatory processes directly (Kanfer, 1992). Influence-related psychological motives and their definitions are shown in Table 8.

"What leaders do should be grounded in the Army Values," according to FM 6-22 (p. 7-3). As such, possessing Army Values should impact the acquisition of influence capital because influence capital is acquired, in part, through leadership by example. Embodying Army Values may impact his or her influence capital by enhancing certain kinds of power, such as expert power, referent power, and/or position power. To the extent that subordinates and others look up to, respect, and turn to a leader for possessing these values, the leader will have greater opportunities for using power and applying influence strategies.

Motivation to lead was initially embedded in a theoretical framework and measured by Chan and Drasgow (2001). *Motivation to lead* (MTL) refers to "an individual-differences construct that affects a leader's or leader-to-be's decisions to assume leadership training, roles, and responsibilities and that affect his or her intensity of effort at leading and persistence as a leader" (Chan & Drasgow, 2001, p. 482). Chan and Drasgow identified three factors that can contribute to one's motivation to lead: Affective-Identity MTL, Noncalculative MTL, and Social-Normative MTL. Individuals who are high in an affective-identity motivation enjoy being identified as a leader and see themselves as having leadership qualities. That is, they want to lead because they identify themselves as leaders. Noncalculative motivation, however, is concerned with the costs and benefits associated with leadership. According to Chan and Drasgow (2001), an individual will be more motivated to fulfill a leadership position if they do not focus on the costs and drawbacks associated with being a leader. Finally, individuals who have a social-normative motivation to lead are motivated by a sense of social duty and obligation.

Table 8

Influence-related Motives and Definitions

| Attribute | Definition |
|--|--|
| Possesses Army Values | Possessing the seven core Army values of loyalty, duty, respect, selfless service, honor, integrity, and personal courage. |
| Motivation to Lead | An internal drive that positively affects an officer's decision to assume leadership training, roles, and responsibilities; his or her intensity of effort at leading; and his or her persistence as a leader. |
| Internal Motives Relevant to Influence | Non-cognitive attributes that drive individual action to acquire a desired outcome such as achievement, power, or affect. The targeted outcome provides the label for the motive. |

Additional research is needed to determine if relationships between the MTL factors, influence strategies, and impression management exist. However, one relationship that seems likely is between Social-Normative MTL and the Appeal to Duty/Morality strategy. It is also likely that Social-Normative MTL will be highly related to impression management, given its duty-oriented motivational underpinnings. Additionally, Affective-Identity MTL should correlate with impression management. Affective-Identity MTL correlates with extraversion (Chan & Drasgow, 2001) which, in turn, correlates with the Social Control scale of Riggio's SSI (Heggestad & Gordon, 2008). *Social control* is defined by Riggio (1986) as "a general skill in social self-presentation... and an ability "to adjust personal behavior to fit with... any given social situation" (p. 651).

Building on the Chan and Drasgow (2001) work, Amit, Lisak, Popper, and Gal (2007) found that motivation to lead accounted for 22% of the variance in leadership performance, defined as suitability for command. Suitability for command, in turn, correlated $r = .87$ with influence on one's platoon in a sample of 402 male Soldiers from the Armored and Infantry Corps of the Israel Defense Forces. Motivation to lead would seem to be an essential component for implementing leadership strategies and tactics effectively, as well as for being open to being trained on such skills.

Distal performance determinants. In the influence framework, distal performance determinants are furthest from the criterion space, influence behavior. Distal performance determinants affect influence behavior indirectly, with medial and proximal performance determinants mediating the relationship between distal performance determinants and the dependent variables. The distal performance determinants in the framework are cognitive attributes, non-cognitive attributes, and leadership/influence experience.

Cognitive attributes. Cognitive attributes are mental activities involved in the processing, acquisition, retention, conceptualization, and organization of various cognitive content (e.g., verbal, numerical, spatial, perceptual, psychomotor) (APA Standards, 1999). Cognitive attributes relevant to influence are described in Table 9.

Table 9

Cognitive Attributes and Definitions

| Attribute | Definition |
|--|--|
| Social Perceptiveness - Individual | Ability to (a) discern the motivations, feelings, and intentions underlying people's behavior by correctly interpreting behavioral cues; (b) see things from others' perspectives; and (c) accurately predict others' behavior. |
| Social Perceptiveness - Systems | Awareness and sensitivity to needs, goals, demands, and problems at multiple system levels, including (a) individual members, (b) relations among members, (c) relations among organizational subsystems, and (d) interactions among the leader's organization and other systems (e.g., other organizations) in the embedding environment. |
| Mental Agility | Frequently seeking out and interpreting information to evaluate the validity of beliefs and assumptions relevant to the Army, resulting in a deeper, broader, and more accurate knowledge base relevant to one's Army role. |
| Relationship Multitasking | Ability to balance and manage interpersonal relationships with a variety of individuals and groups simultaneously. |
| General Cognitive Ability (<i>g</i>) | The processes of acquiring, storing in memory, retrieving, combining, comparing, and using in new contexts information and conceptual skills. |
| Working Memory Capacity | The general ability to maintain information in a highly active state. |

Social perceptiveness is likely required to formulate and execute influence. Social perceptiveness is acknowledged in FM 6-22, which states that "effectively interacting with others depends on knowing what others perceive" (U.S. Army, 2006, p. 6-3). At least two definitions of social perceptiveness exist in the literature. One KSAO, social perceptiveness-individual, involves relating to other individuals and is consistent with much of the individual-differences literature on social intelligence that focuses on understanding others (e.g., Chapin, 1942; Kihlstrom & Cantor, 2000; Moss, Hunt, Omwake, & Ronning, 1927; O'Sullivan, Guilford, & deMille, 1965; Rentsch, Gundersen, Goodwin, & Abbe, 2007; Schneider & Johnson, 2005). Schneider and Johnson (2005) found that social perceptiveness is related to effective supervision and social presence, which is defined as being persuasive, engaging, and carrying oneself well.

Zaccaro et al. (1991) took a different approach to social perceptiveness, drawing on a social-cognitive paradigm. Their definition of leadership-oriented social perceptiveness is seen as facilitating the following: (a) acquisition and interpretation of social information regarding problems that impede organizational progress; (b) personnel dynamics that may constrain or impede certain solution paths (e.g., low subordinate morale or cohesion, conflicts among subordinates); and (c) acquisition and interpretation of social information regarding goal-related opportunities for organizational growth (i.e., identifying affordances in the organizational environment). Based on their definition and conceptualization, this attribute was labeled *social*

perceptiveness-systems. Although distinct concepts, the two social perceptiveness attributes are complementary and, therefore, both included in the list of influence KSAOs. Further, both variations of the social perceptiveness attribute clearly relate to the effectiveness with which someone might seek to apply influence: to the extent that one is able to understand others and accurately interpret social information, it is more likely that the most appropriate and effective influence strategies will be chosen in any given situation.

Another cognitive attribute likely to be relevant to influence strategies and tactics is general cognitive ability (*g*). Humphreys (1979) defined *g* as “the resultant of the processes of acquiring, storing in memory, retrieving, combining, comparing, and using in new contexts information and conceptual skills...” (p. 115). Lohman (2000) noted that psychometric experts believe that *g* involves abstract thinking or reasoning, the capacity to acquire knowledge, and problem-solving ability. General cognitive ability is related to virtually every job, and by implication every task, that has some degree of cognitive complexity (Campbell, 1990). At a minimum, meta-analytic findings indicate that intelligence is related to leadership (Judge, Colbert, & Ilies, 2004). It is likely that intelligence also is related to influence effectiveness, since the ability to analyze relevant information and anticipate a variety of outcomes during an influence attempt requires cognitive ability and the capacity to handle complex information in dynamic situations.

Wong et al. (2003) identified several “meta-competencies” based on a review of the strategic leadership literature, interviews with corporate and Army leader developers, and analysis of the Army’s leader development system. One meta-competency of importance is mental agility, which is especially relevant to senior leaders and listed as a major component of “leader intelligence” in FM 6-22 (U.S. Army, 2006). According to Wong et al., “typical strategic situations lack structure, are open to varying interpretations, and potentially pertinent information is often far-flung, elusive, cryptic, or even contradictory” (p. 6). Strategic leaders must navigate these situations in order to succeed, and those with mental agility are most likely to be able to do this. Since influence is dependent on credibility and credibility is earned by making good decisions consistently, it is likely that mental agility and effective acquisition and application of influence strategies are related.

Multitasking is becoming increasingly important in the workplace, and the military is no exception (Fischer & Mautone, 2005). While multitasking is normally thought of in the context of task performance, it has relevance for the leadership domain as well. Leaders engaged in the influence process have numerous relationships (as well as task requirements) they must take into account when selecting strategies and tactics. For example, making a promise to do something for a host nation counterpart might require asking subordinates to do something difficult in a short period of time, resulting in some depletion of influence capital. Pleasing subordinates by giving them extra time off to build referent power might come at a cost of displeasing superiors. As these examples illustrate, leaders are accountable to multiple constituencies. Satisfying one constituency but not another can result in loss of influence capital and possible derailment (McCartney & Campbell, 2006). Based on the foregoing, we formulated a new variable and labeled it *relationship multitasking*.

Working memory (e.g., Engle, 2002; Kane, Bleckley, Conway, & Engle, 2001) is another KSAO likely important to effective influence. Individuals with low working memory capacity are not able to give as much attention to seek out environmental stimuli, and they are less equipped to incorporate new information into their existing knowledge frameworks than individuals with high working memory capacity (Barrett, Tugade, & Engle, 2004). In the context of influence, leaders with high working memory capacity would have an enhanced ability to perceive and process verbal and nonverbal cues in the environment. Working memory capacity might be important, for example, in a common scenario where the leader must process information "in-the-moment" and then implement or adjust an influence tactic or strategy based on the leader's assessment (Mueller-Hanson et al., 2007).

Non-cognitive attributes. The review revealed a variety of non-cognitive attributes relevant to effective leadership and, by implication, to effective acquisition and application of influence strategies and tactics. The attributes vary in breadth, encompassing broad traits, such as those represented in the five-factor model of personality (FFM; e.g., Goldberg, 1990; McCrae & Costa, 1987), as well as narrower traits, such as self-confidence. They also include positive and negative traits, including dysfunctional (sometimes referred to as "dark side") traits related to the personality disorders (R. Hogan & J. Hogan, 2001). The non-cognitive attributes related to the application of influence strategies, together with their definitions, are shown in Table 10.

The FFM includes extroversion, agreeableness, emotional stability, openness to experience, and conscientiousness, and research suggests these personality factors are related to leadership. For example, Judge, Bono, Ilies, and Gerhardt (2002) conducted a meta-analysis investigating the relationship between FFM personality traits, lower-order personality traits, and leadership. Specifically, Judge et al. examined the relationship between personality and leadership emergence, as well as personality and leadership effectiveness. *Leadership emergence* was defined as the extent to which someone is viewed as a leader by his or her followers. *Leadership effectiveness* was defined as a leader's ability to influence and guide unit activities toward goal attainment. Results of the Judge et al. meta-analysis are summarized in Table 11.

The results of the Judge et al. (2002) meta-analysis suggest which personality attributes might be related to leader influence. With regard to agreeableness, agreeableness had a moderate correlation with leadership effectiveness, though not with leader emergence. Agreeableness would seem instrumental to the acquisition of referent power, which the literature review indicates is a prerequisite for the effective application of influence strategies and tactics. As such, agreeableness should be retained in the list of KSAOs. With regard to openness to experience, it seems likely that learning and applying influence strategies and tactics would require the ability to be open to new ways of thinking, which suggests that it also should be retained in the list of KSAOs. Additionally, sociability, dominance, achievement, and dependability, which are facets of the five overarching personality traits, correlated more highly with leadership than their higher-level traits. This suggests that, where appropriate, traits narrower than the FFM should be considered (Schneider, Hough & Dunnette, 1996).

Table 10

Non-cognitive Attributes and Definitions

| Attribute | Definition |
|--------------------------|--|
| Openness to Experience | The tendency to be imaginative, nonconforming, unconventional, autonomous, inventive, curious, and innovative. |
| Extraversion | The tendency to be sociable, assertive, active, and to experience positive emotions such as energy and zeal. |
| Conscientiousness | Conscientiousness is comprised of two related facets: achievement and dependability. Conscientious individuals tend to be thorough, organized, goal oriented, disciplined, and diligent. |
| Agreeableness | The tendency to be trusting, patient, non-hostile, compliant, caring, and gentle. |
| Emotional Stability | The tendency to be free from persistent negative feelings and to remain calm and levelheaded when confronted with difficult, stressful, or changing situations. Neuroticism is the opposite pole of Emotional Stability and is characterized by negative emotions such as anger, anxiety, or depression, as well as the tendency to be more easily upset and emotionally reactive. |
| Sociability | The tendency to be sociable, outgoing, participative, and friendly. |
| Dominance | The tendency to control one's environment, influence or direct other people, express opinions forcefully, and enjoy and spontaneously assume the role of leader. |
| Achievement Motivation | The tendency to strive to be competent, work hard, set high standards, persist in completing tasks where others give up, and put work before other things. |
| Dependability | The tendency to be disciplined, well-organized, planful, respectful of laws and regulations, honest, trustworthy, wholesome, and accepting of authority. |
| Narcissism (dark side) | A strong sense of ego, self-esteem, and entitlement, along with a characteristic tendency to manipulate and exploit others, as well as manage the impression one makes on others. |
| Narcissism (bright side) | Limited to the more positive aspects of narcissism (i.e., self-esteem, strong ego). |
| Resilience | The tendency to recover quickly from setbacks, shocks, injuries, adversity, and stress while maintaining a mission and organizational focus. |
| Charisma | The tendency to inspire enthusiasm, trust, and passionate faith and loyalty in others, and to inspire others to do things they thought they could not do; someone others want to emulate, be with, and please. |
| Self-Confidence | Tendency to believe in one's own abilities and skills. Characterized by feelings of competence in several areas and an attitude that one can succeed in multiple endeavors. |
| Cultural Tolerance | The degree to which an individual demonstrates tolerance and understanding of individuals from other cultural and social backgrounds. |

Table 10 (continued)

| Attribute | Definition |
|---------------------------------|--|
| Locus Of Control | The characteristic belief that one has more or less control over rewards and punishments. <i>Internal locus of control</i> is the belief that individuals have control over life events; <i>external locus of control</i> is the belief that the environment or fate controls events. |
| Machiavellianism | Willingness to do whatever it takes to get what one wants. Individuals high in Machiavellianism are viewed as politically savvy, highly influential, and at times morally questionable. |
| Self-Monitoring | Differences in the extent to which people value, create, cultivate, and project social images and public appearances through control of their expressive behavior. High self-monitors, out of a concern for the situational appropriateness of their self-presentation, monitor their expressive behavior and accordingly regulate their self-presentation for the sake of desired public appearances. Low self-monitors do not control their expressive behaviors to appear situationally appropriate. Instead, their expressive behavior reflects their own inner attitudes, emotions, and dispositions. |
| Action versus State Orientation | A continuous individual-difference variable, with action orientation at one pole and state orientation at the other. More action-oriented individuals are better able to devote their attention to a current goal. More state-oriented individuals tend to ruminate on alternative goals or emotional states, reducing the cognitive resources available for striving for the current goal. |
| Excitable* | Tendency to be moody and hard to please. Demonstrates intense but short-lived enthusiasm for people, projects or things. |
| Skeptical* | Tendency to be cynical, distrustful, and doubting of others' true intentions. |
| Cautious* | Tendency to be reluctant to take risks for fear of being rejected or negatively evaluated. |
| Reserved* | Tendency to be aloof, detached, and uncommunicative. Demonstrates a lack of interest in or awareness of others' feelings. |
| Leisurely* | Tendency to be independent. Ignores people's requests and becomes irritated or argumentative if they persist. |
| Bold* | Tendency to be unusually self-confident. Demonstrates feelings of grandiosity and entitlement, and over-evaluates own capabilities. |
| Mischievous* | Tendency to enjoy risk taking and routinely testing the limits. Needs excitement. Can be manipulative, deceitful, cunning, and exploitative. |
| Colorful* | Tendency to be expressive, animated, and dramatic. Wants to be noticed and needs to be the center of attention. |
| Imaginative* | Tendency to act and think in creative and sometimes odd or unusual ways. |
| Diligent* | Tendency to be meticulous, precise, and perfectionist. Can be inflexible about rules and procedures and is critical of others' performance. |
| Dutiful* | Tendency to be eager to please and is reliant on others for support and guidance. Demonstrates a reluctance to take independent action or go against popular opinion. |

Note. * Represent the "dark side" of personality.

Table 11

Summary of Judge et al. (2002) Meta-Analysis Results

| Attribute | Overall Leadership | Leadership Emergence | Leadership Effectiveness | Overall Leadership (Government/Military Samples) |
|---------------------------|--------------------|----------------------|--------------------------|--|
| <u>FFM Traits</u> | | | | |
| Agreeableness | .08 | .05 | .21 | -.04 |
| Emotional Stability | .24 | .24 | .22 | .23 |
| Openness to Experience | .24 | .24 | .24 | .06 |
| Conscientiousness | .28 | .33 | .16 | .17 |
| Extroversion | .31 | .33 | .24 | .16 |
| <u>Lower-order Traits</u> | | | | |
| Locus of Control | .13 | | | |
| Self-Esteem | .19 | | | |
| Sociability | .37 | | | |
| Dominance | .37 | | | |
| Achievement | .35 | | | |
| Dependability | .30 | | | |

Note. Estimated corrected correlations are shown. Correlations with leadership emergence and effectiveness, and correlations limited to government/military samples, were unavailable for lower-order traits.

Beyond the FFM, other non-cognitive attributes may be related to leader influence. For example, resilience is recognized by FM 6-22 (U.S. Army, 2006, p. 5-1) as instrumental to effective leadership. The ability to recover quickly from adversity will not only enable the leader to continue to make good decisions, but also to gain the respect of those with whom he or she works. How a leader responds to a failure to influence effectively will likely impact the ultimate success or failure of an influence attempt. If a resilient leader selects an incorrect influence strategy, he or she will likely try again using a different strategy. A less resilient leader may be prone to give up or may try fewer strategies. Ong, Bergeman, Bisconti, and Wallace (2006) suggested conceptual links between resilience and positive emotions. For example, they suggested that resilient individuals selectively mobilize positive emotions to recover from daily stressors and to build up or restore depleted resources so that they can recover more quickly from future adverse events.

The inclusion of charisma in the list of KSAOs is based on research described by Bass (1990) and several meta-analyses referred to by Erez, Misangyi, Johnson, LePine, and Halverson (2008). Those meta-analyses suggest that charismatic leadership behaviors are related to leader effectiveness (DeGroot, Kiker, & Cross, 2000; Fuller, Patterson, Hester, & Stringer, 1996; Lowe,

Kroeck, & Sivasubramaniam, 1996) as well as subordinates' effectiveness, effort, job satisfaction, and commitment (DeGroot et al., 2000). Erez et al. (2008) found that some of the effectiveness of charismatic leaders results from their transference of positive affect through positive expressions (e.g., smiling rather than frowning). One might expect displays of charisma to be positively associated with influence strategies that rely on positive emotion (e.g., establishing rapport, providing inspiration, and drawing on friendship/loyalty). Conversely, charisma is likely to be negatively associated with influence strategies that rely on negative emotion (e.g., use of pressure, threats, and warnings).

Self-confidence is another attribute relevant to acquisition and application of influence capital. For example, individuals scoring highly on the California Psychological Inventory (CPI; Gough & Bradley, 1996) Leadership Index tend to be described as self-confident (Gough, 1969). Evidence also indicates individuals lacking self-confidence use inappropriate influence strategies. Specifically, Instone, Major, and Bunker (1983, cited in Bass, 1990) found that, "compared to those whose self-confidence was high, those who lack self-confidence tended to use coercion rather than expert power" (p. 247). Reliance on coercion tactics due to a lack of self-confidence will likely deplete influence capital unnecessarily, thereby undermining the effectiveness of the leader.

Machiavellianism is inconsistent with leadership principles described in FM 6-22 due to the general disregard for morality in the pursuit of goals. Highly Machiavellian individuals lie, manipulate information, pretend to understand targets' problems, threaten to withdraw help, and block targets' actions (Bass, 1990). Although Machiavellianism is generally associated with "bad leadership," Machiavellianism may be associated with greater use of influence strategies relying on pressure, threats, or warnings. Further, it is possible that leaders high in Machiavellianism may also rely on impression management tactics as a means to manipulate their image and exhibit the pretense of understanding others. In a sample of 199 Finnish cadets in a military officer training program, Paunonen, Lönnqvist, Verkasalo, Leikas, and Nissinen (2006) found that Machiavellianism acted as a suppressor variable. They found positive correlations between both (a) egotism and leadership emergence, and (b) self-esteem and leadership emergence. These relationships were found, however, only in the absence of high Machiavellianism.

Judge, LePine, and Rich (2006) conducted research on the relationship between narcissism and various personality and criterion variables, including leadership. They argued that, whereas narcissists may view themselves as superior leaders, others will form the opposite conclusion because the tactics used by narcissists (e.g., aggressing at and derogating others, self-aggrandizement) undermine interpersonal relationships. Consequently, individuals with narcissistic tendencies may need to either rely on more proactive tactics like pressure or use impression management tactics (in an attempt to craft a more positive image). The pursuit of self-esteem, something toward which narcissists are predisposed, is also argued to be costly in terms of others' perceptions. Judge et al. reported that, in a sample of graduate students, narcissism correlated moderately with self-ratings of leadership, but less with peer ratings of transformational leadership. In a different sample of members of a beach patrol, they again found that narcissism correlated moderately with self-rated transformational leadership and was uncorrelated with supervisor-rated leadership. While Judge et al. did find self-other rating differences with respect to narcissism-leadership relations, the Judge et al. findings, as well as

descriptions of narcissist-leaders in other authoritative sources (e.g., Bass, 1990), suggest that the narcissism-leadership relationship may be complex.

Paunonen et al. (2006) shed some light on the complexity of narcissism by distinguishing “bright side” from “dark side” narcissism. *Bright side narcissism* is defined by self-esteem and egotism; *dark side narcissism* is defined by self-deception, impression management and manipulateness. While impression management may be viewed positively from the perspective of someone being motivated to present an image that is consistent with personal identity (e.g., creating the appearance of being capable), it may also be viewed more negatively. In the latter case, the motives driving impression management are more aligned with seeking reward, such as fostering liking and even respect. While both motivations for impression management can serve to achieve successful influence outcomes, certain forms of impression management come across as fundamentally less genuine and more self-centered and manipulative in nature. Paunonen et al. (2006) found that the best-rated leaders in their sample expressed the bright side of narcissism and suppressed the dark side. That is, they exhibited a profile such that they were high in egotism and self-esteem, but low in manipulateness and impression management. As such, according to Paunonen et al., if someone demonstrates narcissism that is manifested as self-importance and high impression management, they are less likely to be judged as a good leader. In contrast, if someone demonstrates narcissism that is characterized as egotistic but nevertheless authentic (i.e., dealing with others in a straightforward and non-exploitative manner), they are more likely to be judged a good leader.

Like narcissism, other dispositional variables have been examined from both the “light” and “dark” side perspectives. R. Hogan and J. Hogan (2001) developed eleven scales designed to assess dysfunctional dispositions using personality disorders captured by DSM-IV (American Psychiatric Association, 1994). The ensuing self-rated personality instrument is designed to be used with managers and executives to provide developmental feedback to enhance leadership effectiveness. The scales, however, are not as clinically oriented as the disorders described in DSM-IV, and do not assess psychopathology per se. The scales were labeled *Excitable*, *Skeptical*, *Cautious*, *Reserved*, *Leisurely*, *Bold*, *Mischievous*, *Colorful*, *Imaginative*, *Diligent*, and *Dutiful*.

Excitable correlates with ratings of impatience, irritability, moodiness, negativity, and frustration with others. Skeptical correlates with difficulty trusting and oversensitivity. Cautious correlates with being easily embarrassed, failure to take risks, and sensitivity to criticism. Reserved correlates with detachment, tendency to withdraw, and social ineptness. Leisurely correlates positively with procrastination, and negatively with encouraging constructive criticism. Mischievous correlates with deceitfulness and arrogance. Colorful correlates with lack of self-restraint and craving recognition. Imaginative correlates with unconventionality, having odd attitudes, and flightiness. Diligent correlates with hyper-conscientiousness and perfectionism, and dutiful correlates with “is a follower.” R. Hogan and J. Hogan (2001) concluded that a consequence of these dysfunctional dispositions is that they erode trust, and that people with high scores on these dysfunctional disposition scales are likely to be self-centered, serving themselves before they serve others. Social interaction would be a one-way exchange process; i.e., no exchange. In addition, the authors suggest that a lack of trust would erode the ability of people possessing these dysfunctional dispositions to build teams and get along with

others. They also suggest that such people would repeatedly engage in the same self-defeating behavior, unable to learn from experience. Given these correlates, it is difficult to imagine that individuals scoring high on these scales would acquire the influence capital necessary to become good leaders. However, each of these dispositions is likely to be related to influence strategies in slightly different ways. For example, mischievous may be related to certain types of impression management activities, while reserved is more likely related to decreases in building social capital and is probably associated with failure to engage in influence attempt.

Ample evidence indicates a relationship between self-monitoring (Snyder, 1974) and leadership behavior or emergence. Day, Schleicher, Unckless, and Hiller (2002) conducted a meta-analysis of the validity of self-monitoring against various work criteria, including leadership. Overall, Day et al. found a modest correlation between self-monitoring and leadership criteria. Day et al. observed that one explanation for these findings is that the tendency of high self-monitors to be more other-directed than low self-monitors may help high self-monitors discern the needs of followers and gain their acceptance by appropriately responding to them. As such, self-monitoring may be related to leadership and influence by means of facilitating the acquisition of referent power, and referent power, in turn, establishes a foundation for specific influence strategies, such as establishing rapport and drawing on friendship/loyalty.

Bowden et al. (2003) identified social KSAOs and attributes important to the future success of objective force Soldiers and identified *cultural tolerance* as an important KSAO. Bowden et al.'s rationale was that Soldiers will need to deal with others in their units from varying socioeconomic backgrounds and ethnicities, as well as from other cultures during interactions with Army and host nation personnel. Along these lines, Ramsden Zbylut et al. (2009) found that cultural KSAs such as *suppressing cultural bias* were significantly related to proactive influence tactics, as well as indirect influence such as establishing credibility. It should be noted that cultural tolerance is different from cultural intelligence in that cultural intelligence is partly context-specific and encompasses knowledge of specific norms and practices of a given culture.

Action-state orientation (Kuhl, 1994) is an attribute concerned with individual differences in the ability to initiate and maintain intentions (Diefendorff, Hall, Lord, & Streat, 2000). The action versus state orientation attribute is comprised of three facets: preoccupation, hesitation, and volatility. The action-oriented pole of the preoccupation subscale refers to the ability to detach from thoughts about alternative goals or undesirable events that may interfere with progress on the task at hand. The state-oriented pole is associated with impaired effectiveness due to the perseveration of thoughts related to some unpleasant experience (real or simulated), often involving failure. Action-oriented individuals on the hesitation subscale are easily able to initiate work on tasks. State-oriented individuals on the hesitation subscale have difficulty initiating intended goal-directed activities. Action-oriented individuals on the volatility subscale are able to effectively maintain focus on an intention until a task is complete, whereas more state-oriented individuals are easily pulled off-task. Thus, action-oriented leaders are more likely to take initiative, be productive, and remain task-focused.

A compelling rational link between action-state orientation and leadership strategies/tactics exists. Leadership is largely an action-oriented set of behaviors, and leaders generally are more effective when they are focused, decisive, and calm. More to the point, formulating and implementing leadership strategies and tactics would also seem to require behaviors associated with action-orientation. For example, acquiring a certain type of influence capital, and implementing an influence strategy over multiple episodes to attempt to get a host-national counterpart to comply with a request would both seem to require focus and the ability to follow through on personal goals; i.e., action-orientation.

Leadership/influence experience. Experience KSAOs refer to events that are experienced by an individual that relate to, and have the potential to enhance, his or her influence behaviors. Experience can be measured at different levels of specificity (e.g., task, job) and using different measurement modes (e.g., amount, time spent, type; Quiñones, Ford, & Teachout, 1995). Two experience KSAOs were identified through the literature review. The first, *past leadership experience*, was defined as "quantity and quality of past leadership experience." Chan and Drasgow (2001) found that past leadership experience was correlated with motivation to lead (especially affective-identity motivation to lead). Amit, et al. (2007) found that affective-identity motivation to lead is related to leadership performance, defined as influence on one's platoon and suitability for command.

The second experience variable was *prior influence experience*, which are life history experiences in which leaders demonstrated influence with others (Atwater, Dionne, Avolio, Camobreco, & Lau, 1999). Individuals with prior influence experience may have had more opportunities to discover what influence strategies are effective in different situations, thereby ensuring that future influence attempts will be more successful. Atwater et al. (1999) reported that prior influence experience predicted leader emergence and leader effectiveness over a four-year period in a sample of 401 military academy cadets. Thus, it appears that having had prior opportunities for influence is related to subsequent demonstrations of leadership

Identification of KSAO Measures

This section describes the process by which the research team identified existing measures for each of the KSAOs described in this report. The subsequent paragraphs detail what kind of information was captured, the sources from which information was gathered, and the degree of measurement coverage. Appendix B presents a list of existing measures for the different KSAOs described in this report. Curriculum designers can use the list to identify measures for classroom exercises to enhance student self-awareness of leadership strengths and weaknesses. Additionally, researchers who wish to investigate specific KSAOs underlying the leader influence process may find the list of measures useful. Prior to using any measure in Appendix B, publishers of the measure should first be contacted to ensure that the measures are used appropriately and legally.

Information Captured

We compiled a spreadsheet that organized KSAOs and existing measures of those KSAOs. "Existing measure" can mean either: (a) full instruments that are comprised of one or

more scales measuring aspects of the same underlying KSAO, or (b) individual scales within broader instruments. For example, existing measures for the KSAO *dominance* included the Dominance scales from the CPI and Jackson Personality Inventory (JPI; Jackson, 1994) and the Social Potency scale from the Multidimensional Personality Questionnaire (MPQ; Tellegen, 1982). In contrast, the Narcissistic Personality Inventory (NPI; Raskin & Hall, 1979, 1981), which is comprised of four scales, was identified as a full instrument measuring narcissism.

To the extent possible, the following information was captured for each measure: (a) description (e.g., format, length, scales, and response type); (b) vendor/author; (c) contact information for vendor/author; (d) administration options; (e) costs; (f) psychometric information; (g) key references; and (h) miscellaneous notes. Within these categories, further decisions were made about how to consistently represent various aspects of the measures. For example, if a measure was found in the public domain, this was highlighted under vendor/author information. For public domain measures, the source of the items (e.g., journal article) was listed under references, while the specific location of the items (e.g., table or appendix) was listed under contact information. Cost for these measures was noted as “free.” If a measure was clearly non-commercial, yet the items were not available from the source, it was listed under cost information as being *proprietary (non-commercial)*. In such cases, the source cell generally indicates that the author(s) should be contacted for access to the full scale. As such, we sought to provide under contact information a current email or website address at which the author(s) could be reached to make such a request. If a measure was commercial, it was listed under cost information as *proprietary (commercial)*. Most commercially available measures could be administered using a variety of formats, including paper-and-pencil, computer, and internet administration options. Measures available in the public domain were almost exclusively paper-and-pencil based. Less information was available about the administration options for *proprietary (non-commercial)* tests, although it is likely that most of these are paper-and-pencil only.

Sources of Information

Four primary sources were used to identify and evaluate existing measures of KSAOs: (a) the literature reviewed in this report, (b) *Buros' Mental Measurement Yearbook*, online searchable database, (c) keyword searches using the PsychInfo database, and (d) our knowledge of KSAOs and their measures.

Literature review. Any empirical research described in the literature review that used a measure of one of the KSAOs was flagged. We subsequently returned to these sources to evaluate whether to include the measure(s) in question. We applied three criteria to decide whether a particular measure should be included in the spreadsheet of existing measures: (a) the measure should be self-report due to its intended use for leader self-assessment², (b) availability of psychometric evidence to support meaningful interpretation of test scores, and (c) the KSAO measured by the instrument should be the same as, or closely related to, the KSAO identified from the literature review. With regard to the first criterion, few measures were identified that

² A goal of this contract.

relied on “other” reports of any kind (e.g., role-play simulations, lab-based observations, 360-degree assessments). The second criterion concerning psychometric evidence proved to be more difficult to assess because of variability in how well psychometric evidence is documented in the literature. The third criterion involved a more subjective assessment of construct congruence based partly on comparing measure descriptions with our own KSAO definitions, as well as reviewing validity evidence informing how scores from a measure should be interpreted.

Sources from the literature review that included measures of one or more KSAOs were noted. We returned to these sources first and used them as a point of departure to gather information about a specific measure or measures. Measures used in empirical research represented a mix of commercial and non-commercial measures, although more of the latter were identified overall. Further, the majority of non-commercial measures were available in the public domain, with far fewer being available only by contacting the author(s) directly. Typically, we found that articles and chapters provided good descriptions of the following: KSAO measured, test length, number of scales, format, and administration. In the case of a number of non-commercial measures, the primary purpose of the article or chapter was to describe the development and validation of the measure. These sources were especially helpful and provided much of the information needed to populate the spreadsheet.

One category for which we had the most difficulty gathering information concerned psychometric evidence supporting the interpretation of specific instruments. In general, it was often difficult to find strong validity documentation. For commercially available measures, validity evidence was typically available directly on the publisher’s website or summarized in *Buros’ Mental Measurements Yearbook*.

Considerable variability existed in the degree to which different sources provided detailed evidence supporting a measure’s validity. Because of the variability in the amount and quality of validity evidence, few measures were excluded outright from consideration on this basis alone. Rather, we erred on the side of comprehensiveness and opted to include measures we identified in the existing literature even when evidence of their validity was not always thorough. Cases for which validation information was sparse are noted, and additional caution should be used when considering use of such measures in leader development activities.

Buros’ Mental Measurements Yearbook. A second approach to identifying existing measures used the online version of *Buros’ Mental Measurements Yearbook* (MMY; <http://www.unl.edu/buros>). The MMY provides descriptive information, professional reviews, and reviewer references for commercially available standardized tests published in the English language. The database covers test domains such as educational skills, personality, vocational aptitude, psychology, and related areas. Two different keyword searches were conducted using the MMY searchable database. First, any commercial measures identified via the literature review were also looked up in the database. Additional information available in the MMY was added to that gathered from other sources (e.g., the article or book chapter from which the measure was originally identified and/or the publisher’s website). Second, keywords relating to the KSAOs were searched to determine whether any measures not yet identified were available and should be included.

In addition to providing supplementary descriptive information about the measures, the MMY database provided information about the psychometric properties of specific instruments.

Most measures included in the MMY have at least one, if not two, reviews provided by academic or practicing psychologists. Reviews in the MMY provide a relatively objective summary of psychometric information about a measure reported in its manual, typically accompanied by professional opinion about the quality of the measure. Therefore, relevant information about a measure's basic description and/or its psychometric properties was summarized from professional reviews published in the MMY and included under either measure description or validation description.

Keyword search of PsychInfo database. A third approach to identifying existing measures was a keyword search of the PsychInfo database. PsychInfo is a database of psychological literature from the 1800s to the present. Articles that appeared to contain information about relevant measures were located. The keyword search was fruitful for surfacing articles describing the development and validation of new measures since the associated abstracts highlighted this fact.

Knowledge of KSAOs and measures. Finally, we used our own knowledge of KSAOs, their related measures, and other relevant literature in conjunction with PsychInfo, to broaden and deepen our identification and evaluation of influence-related KSAOs.

Measurement Coverage

Overall, there was good coverage of the KSAOs in terms of existing measures. The literature review identified a total of 66 unique KSAOs underlying leader influence, and most KSAOs had a minimum of one existing measure. However, there were some notable exceptions and these are discussed elsewhere in the report. A complete list of identified measures is provided in Appendix B. Table 12 presents a summary of the number of measures identified for each broad KSAO category.

For six cognitive KSAOs and 22 non-cognitive (e.g., personality) KSAOs, multiple commercial and non-commercial measures were identified. Compared to other KSAO categories, these two sets of distal determinants had the largest number of commercial measures. For personality attributes in particular, a relatively large number of public domain measures were identified, more than for other categories of KSAOs. However, our search did not identify existing measures for two KSAOs in the ability category: social perceptiveness (systems) and relationship multitasking. These KSAOs were identified in research that is largely theoretical, and work has not yet advanced to measurement.

For the KSAO categories of experience (two KSAOs), motives (3 KSAOs), self-regulation (3 KSAOs), and procedural knowledge and skills (17 KSAOs), at least one existing measure was identified for most KSAOs. These measures represented a mix of public domain and proprietary (non-commercial) measures. For procedural knowledge and skill, several commercial measures also were identified. However, we could find no existing measure for past leadership experience. We did identify research that used a number of biodata items, and these approximated a measure of past leadership experience, but we were unable to find a readily identifiable scale that targeted past leadership experience.

Table 12

Frequencies of Identified Existing KSAO Measures

| KSAO category (Number of KSAOs) | Public Domain | Proprietary— Non-commercial | Proprietary – Commercial |
|------------------------------------|------------------|--------------------------------|-----------------------------|
| Ability (6) | 3 | 0 | 5 |
| Personality (23) | 14 | 0 | 11 |
| Experience (2) | 0 | 0 | 1 |
| Declarative Knowledge (9) | 0 | 0 | 0 |
| Motives (3) | 3 | 3 | 0 |
| Procedural Knowledge & Skill (17) | 7 | 5 | 7 |
| Self-Regulation (2) | 2 | 0 | 2 |
| Leadership Styles (3) | 3 | 0 | 1 |
| Total (66) | 32 | 10 | 28 |

Note. The number of measures listed for each KSAO category is the number of *unique* measures. However, the total number of measures ($n = 70$) represents overlap in measures commonly identified in two or more categories.

We also were unable to identify existing measures of three procedural knowledge and skills: frame changing, behavior matching, and social metacognition. *Behavior matching* (sometimes called "mimicry") refers to copying personal and culturally appropriate displays and actions, such as facial expressions and body postures. Although considered an aspect of cultural intelligence, for which two existing measures were identified, behavior matching is a phenomenon that has typically been researched in laboratory settings and rated by trained observers. Hence, to our knowledge no existing self-report measures exist. *Social metacognition* is the ability to impose structure on complex, ill-defined social problems while considering available resources and constraints. It includes identifying information needed to understand the nature of social problems, as well as issues that should be considered to generate viable solutions. We did identify a 3-item, open-ended response measure of social judgment skills (see Zaccaro et al., 2000). However, it is somewhat experimental in nature and requires trained raters to score written responses, and thus does not appear to exist in self-report form. *Frame changing* refers to the frames of reference people use in order to interpret the world around them and make sense of the environment. Changing frames requires individuals to switch from one frame of reference to another, where each frame is based on a different culture/perspective, to interpret environmental cues. To the best of our knowledge, no measure currently exists that assesses the degree to which individuals engage in frame changing.

One category of KSAOs for which no existing measures were identified is declarative knowledge. This is interesting because declarative knowledge refers to knowledge about facts, things, and procedures, and is routinely measured by paper-and-pencil tests. Influence-related KSAOs included factual knowledge of different kinds, such as cultural, geopolitical, social, tactical, technical, and military knowledge. Yet no tests were identified via any of the four approaches used to search for existing measures. While our current investigation did not reveal any measures, measures of these different kinds of knowledge may exist. It is entirely possible, for example, that organizations such as the U.S. State Department administer knowledge tests for domains such as geopolitical awareness. Similarly, measures may have been developed specifically for the Army, like knowledge of core cultural values. Therefore, we qualify our conclusion that no existing measures are available for the declarative knowledge KSAOs we identified by stating that no *readily identifiable* measures were found. We acknowledge that some may exist, but if so, they are neither commonly used in research nor widely available commercially.

Summary

In sum, measures could be identified for the majority of KSAOs. For other KSAOs identified in the literature review (e.g., social perceptiveness-systems and relationship multitasking), research has not yet advanced much beyond theory development. As such, measures have yet to be developed. Still other KSAOs are not readily amenable to self-report (e.g., behavior matching and social metacognition), and thus would be difficult for a leader to use in a self-development context.

In contrast to the KSAOs just mentioned, many measurement options exist for the cognitive and non-cognitive KSAOs. These options include a range of both commercial and non-commercial measures, and these measures have been well-researched. Relatively robust psychometric information exists in many cases, and users of these measures can, by and large, be reasonably confident in interpretations based on test scores. Such conclusions do not hold quite as firmly for the measures identified in the medial and proximal determinant domains (e.g., experience, motives, self-regulation, and procedural knowledge and skill). Many of these measures are available only in the public domain. While they are essentially free to administer, several have not been as closely scrutinized from a psychometric perspective. Additionally, it is important to acknowledge that some of these measures were developed primarily for research purposes and have been examined primarily within a relatively narrow context. As such, appropriate caution should be applied when considering these measures for use in any leader self-development intervention.

Recommendations Regarding KSAO Measurement

This section explores the utility of different measurement approaches for different leader influence KSAOs, primarily within the context of leader self-development. The information presented in this section can enable Army researchers and other Army personnel interested in developing new assessment measures for influence-related KSAOs.

Specification of Measurement Constraints

A primary goal of this project was to explore different measurement approaches to the leader influence KSAOs for the purpose of leader self-development and self-awareness. For example, these measures might be used in a developmental assessment center for company grade officers or offered for self-development purposes as part of classroom instruction. Additionally, we were interested in self-development tools that could be readily accessed via a distributed learning framework.

The above stipulations placed constraints on which types of measurement approaches would be most suitable for leader self-assessment and development contexts. For example, all measures must be able to be self-administered. Another premise was that the measures should be amenable both to paper-based and online administration. Moreover, measurement methods should have a reliable record of success in one or more domains of the taxonomic model of influence behavior. For example, graphology was not considered due to lack of validity evidence (Schmidt & Hunter, 1998) and work sample tests were not considered because their "hands-on" nature is not appropriate for self-administration. Table 13 lists measurement methods that fit within the measurement constraints specified above.

Table 13

List of Potential Methods for Measuring KSAOs

| Method | Description | Reference(s) |
|------------------------------------|---|---|
| Ability Test | Ability tests require responses based on remembering information; producing ideas or solving problems; or perceiving, comparing, and evaluating stimuli. Examples include tests of verbal abilities, numerical scales, spatial perception, and perceptual speed. Tests of general intellectual ability assess individual-differences pertaining to broad, abstract thinking or reasoning, the capacity to acquire knowledge, and problem-solving ability. | Ackerman & Humphreys (1990); Lubinski (2000); U.S. Department of Labor (1999) |
| Aptitude Test | Aptitude tests sample repertoires of skills and knowledge that are narrower than those sampled by general intelligence tests and that typically reflect long-term learning of material related to educational or training performance. | Ackerman & Humphreys (1990); Kuncel, Hezlett, & Ones (2001) |
| Job Knowledge Test (JKT) | JKTs typically involve specific questions to determine how much an examinee knows about particular job tasks and responsibilities. | Schmidt & Hunter (1998); U.S. Department of Labor (1999) |
| Structured Non-cognitive Inventory | These are questionnaires or checklists that elicit information about an individual in areas such as work values, interests, attitudes, personality, and motivation. | Dawis (1991); Hogan (1991); U.S. Department of Labor (1999) |

Table 13 (continued)

| Method | Description | Reference(s) |
|-----------------------------------|---|---|
| Structured Survey | These are tools that enable individuals to systematically and objectively gather, record, and analyze data to aid them in making business decisions. Questions assess areas such as employee opinions, attitudes, job satisfaction, intentions, and observations. Questions also assess the satisfaction and opinions of important stakeholders, such as customers. | Kraut (1996) |
| Situational Judgment Tests (SJTs) | SJTs are tests in which examinees are presented with written or video-based depictions of hypothetical scenarios, and are asked to identify an appropriate response from a list of alternatives. | Chan & Schmitt (2005); Lievens, Buyse, & Sackett (2005); Motowidlo, Dunnette, & Carter (1990) |
| Performance Ratings | Performance ratings are estimates of performance made by supervisors, peers, self, or others familiar with the work of the ratee. Response formats include graphic rating scales, behavioral checklists, behaviorally anchored rating scales, behavior summary scales, scaled responses, and computer adaptive rating scales. | Borman (2001); Bracken, Timmreck, & Church (2001); Campbell (1990) |
| Biodata Inventory | Biodata inventories generate descriptions of people's life histories by presenting test-takers with a common set of questions about their behavior and experiences in specific situations likely to occur earlier in their lives. Items rely on the principle that past behavior is the best predictor of future behavior. Biodata items must possess several characteristics: (a) historical, (b) observable (c) objective, (d) discrete, (e) verifiable, (f) controllable, (g) job relevant, and (h) noninvasive. | Guion (1998); Mael (1991); Mumford & Stokes (1992); Stokes, Mumford, & Owens (1994) |
| Accomplishment Record | Accomplishment records ask job candidates to provide written descriptions of their accomplishments for several KSAOs or performance dimensions. Each accomplishment contains a description of the situation, the candidate's actions, and the outcome of the candidate's actions. Trained raters evaluate the written responses against a scoring rubric. | Guion, (1998); Hough (1984) |
| Experience Inventory | Work experience refers to events that are experienced by an individual that relate to the performance of some job. It can be measured at different levels of specificity (task, job, organization) and using different measurement modes (e.g., amount, time spent, type). | Quiñones, Ford, & Teachout (1995) |

In certain cases, similar measurement methods were combined for ease of presentation. For example, ability and aptitude tests were combined, and surveys were incorporated into the structured non-cognitive inventory category (hereafter referred to as “surveys”). JKTs were relabeled as job/role knowledge tests (JRKTs) to reflect the fact that some individuals may play roles that go beyond their job description and possess corresponding role knowledge. We limited performance ratings to self-rated performance, given the constraint that KSAO measures must be self-administered.

Identifying Effective Measurement Methods for KSAOs

For each KSAO, we rated the usefulness of different measurement approaches using a scale adapted from Russell and Peterson (1997):

This measurement method is likely to be _____ for measuring this KSAO:

1 = Not useful

2 = Slightly useful

3 = Somewhat useful

4 = Useful

5 = Very useful

Ratings were based on a consensus discussion between two of the report's authors. These ratings were subsequently reviewed and approved by the project director. One or more measurement methods were rated as useful or very useful for 62 out of 64 (97%) of the KSAOs. Fifty-five KSAOs had one measurement method that was rated as useful or very useful. The following paragraphs discuss the KSAOs for which one or more measurement methods was rated as 4 (*useful*) or 5 (*very useful*).

Ability domain. Table 14 summarizes the usefulness ratings of the different measurement approaches for five KSAOs within the ability domain. The ability/aptitude test method was rated *very useful* (5) for general cognitive ability and working memory capacity, but was rated as *somewhat useful* (3) or less for the other KSAOs.

The survey method was rated as the best method for the social perceptiveness-individual, mental agility, and relationship multitasking (ratings of *useful*, 4). The ability/aptitude test method also appeared to be a *somewhat useful* (3) approach to measure social perceptiveness-individual. In principle, the ability/aptitude method should be at least as good as the survey method for measuring social perceptiveness-individual. Attempts to measure this KSAO with ability/aptitude tests have, however, met with limited success (Kihlstrom & Cantor, 2000), and the developers of the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT; Mayer, Salovey, & Caruso, 2002), an ability measure of emotional intelligence, recently indicated that the MSCEIT “may be insufficient to validly assess a person’s accuracy in emotional perception” (Mayer, Salovey, & Caruso, 2008, p. 514).

Mental agility was deemed best measured by a survey format (i.e., structured non-cognitive inventory). Mental agility is a hybrid construct involving both ability and personality facets, and was classified as an ability because of its cognitive elements. However, mental agility is somewhat akin to typical intellectual engagement, which is highly related to Openness to Experience (Goff & Ackerman, 1992). Because of the personality-type attributes of mental agility, mental agility is best measured using a survey because it involves typical, rather than maximal, behavior. Typical performance is how an individual performs on a regular basis, while maximal performance is how one performs when exerting as much effort as possible.

Table 14

Ratings for Measurement Methods for KSAOs within the Ability Domain

| | Ability/ Aptitude Test | Self- Ratings | Biodata | JRKT | Survey | SJT | Accomplish- ment Record | Experience Inventory |
|---------------------------------------|------------------------------|------------------|---------|------|--------|-----|----------------------------|-------------------------|
| Social Perceptiveness - Individual | 3 | 1 | 1 | 1 | 4 | 2 | 1 | 1 |
| Social Perceptiveness - Systems | 2 | 1 | 1 | 2 | 3 | 4 | 1 | 1 |
| Relationship Multi- tasking | 1 | 1 | 2 | 1 | 4 | 3 | 1 | 1 |
| Cognitive Ability (g) | 5 | 1 | 1 | 1 | 1 | 2 | 1 | 1 |
| Working Memory Capacity | 5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Mental Agility | 1 | 1 | 2 | 1 | 4 | 2 | 1 | 1 |

Note. 1 = Not useful, 2 = Slightly useful, 3 = Somewhat useful, 4 = Useful, 5 = Very useful

While a survey method also was identified as useful for relationship multitasking, relationship multitasking was a KSAO that we identified as having no existing measure. Measurement of this KSAO would likely involve the same kinds of steps that are taken when any personality scale is developed. Because relationship multitasking is a novel construct, however, it is prudent to develop a model of the construct first, and generate a pool of items that is over-inclusive to ensure full coverage of the construct. At that point, the boundaries of the construct can be explored through examination of item-total correlations, factor-analytic techniques, and the like. One qualification to this recommendation is that, for a self-development intervention related to leader influence, the construct should be contextualized to be appropriate to an Army officer, and facets for which there is no rational or empirical basis to expect a relationship with acquiring or applying influence capital should be omitted from measurement. Contextualization of personality items is gradually receiving more attention, and there are good reasons why contextualized personality measures should be more valid for their intended uses than non-contextualized personality measures (Heggestad & Gordon, 2008). Specifically, some aspects of behavior associated with personality are dependent on the context in which the behavior occurs. For example, someone may be extraverted at work because job performance demands it, but behave in a more introverted fashion when not at work. Thus, personality measures that focus on behaviors as they occur in the job context may be more useful for performance improvement purposes than measures that focus on an individual's behaviors across a variety of situations not relevant to the job.

Given the contextualized nature of the social perceptiveness-systems KSAO, a context-driven, scenario-based measurement method was deemed useful. Thus, the SJT was rated *useful* (4). As discussed earlier, no measures of social perceptiveness-systems exist. With respect to

measuring social perceptiveness-systems, several points should be considered. First, given that the KSAO deals with social perceptiveness, a multimedia SJT, in which not only verbal, but nonverbal and paraverbal cues are present, would be desirable. Given that social perceptiveness-systems involve multiple layers of relationships, the situations depicted would have to be relatively complex. We are not aware of any literature that has directly compared multimedia and paper-and-pencil SJTs, but it seems fair to note that a paper-and-pencil approach would make it difficult to convey the nonverbal and paraverbal cues in a way that does not make the correct answer obvious. It also should be noted that a paper-and-pencil version would involve a heavier reading load and greater verbal ability.

In addition, the social perceptiveness-systems attribute involves higher-level leadership than may be required of company grade officers. Yet the attribute is an important one, and likely to reveal important information about the potential of officers to advance to levels requiring perceptiveness with respect to more complex and abstract social interrelationships. That said, one cannot ask company grade officers to respond to scenarios for which they would clearly lack relevant knowledge. Therefore, if a measure were developed for company grade officers, it would be important to limit the scope to levels of interrelationships of which company grade officers could be expected to have knowledge. For example, relations among organizational subsystems would be limited only to those Army subunits with which company grade officers would be familiar, and knowledge regarding officers' constituent organizations and other "systems in the embedding environment" would be limited in scope relative to what one might ask battalion or brigade commanders.

Non-cognitive domain. Table 15 summarizes the usefulness ratings of the different measurement approaches for KSAOs within the non-cognitive domain (e.g., personality). The survey method (i.e., structured non-cognitive inventory) was rated as the best method for all of the KSAOs in the non-cognitive domain. Indeed, the survey method was rated as *very useful* (5) for all but one KSAO within the non-cognitive domain. For cultural tolerance the survey method was rated as *useful* (4) because it involves understanding, as well as tolerating, individuals from other cultures and social backgrounds. As such, there is a social perceptiveness component to the cultural tolerance KSAO, and there may also be a knowledge component with respect to knowledge of one's culture relative to the culture of others.

For the majority of non-cognitive KSAOs, the structured biodata assessment was rated as *somewhat useful* (3). In principle, biodata items can be used to measure most aspects of personality. However, there are some elements of personality that are difficult to capture using a biodata format (Guion, 1998; Mael, 1991). Biodata items by definition focus on historical, observable, objective, and verifiable information that can be meaningfully scored across test takers. Thus, any element of personality that does not result in a comparable or biographically similar experience across test takers cannot be measured using biodata. For example, some elements of emotional stability or self-confidence may largely be an internal experience or may not manifest themselves in comparable biographical events across different people's lifetimes.

Table 15

Ratings for Measurement Methods for KSAOs within the Non-cognitive Domain

| | Ability/ Aptitude Test | Self- Ratings | Biodata | JRKT | Survey | SJT | Accomplish- ment Record | Experience Inventory |
|---------------------------------|------------------------------|------------------|---------|------|--------|-----|----------------------------|-------------------------|
| Openness to Experience | 1 | 1 | 3 | 1 | 5 | 1 | 1 | 1 |
| Emotional Stability | 1 | 1 | 3 | 1 | 5 | 2 | 1 | 1 |
| Extraversion | 1 | 1 | 3 | 1 | 5 | 2 | 1 | 1 |
| Conscientiousness | 1 | 1 | 3 | 1 | 5 | 2 | 1 | 1 |
| Agreeableness | 1 | 1 | 3 | 1 | 5 | 1 | 1 | 1 |
| Sociability | 1 | 1 | 3 | 1 | 5 | 2 | 1 | 1 |
| Dominance | 1 | 1 | 3 | 1 | 5 | 2 | 1 | 1 |
| Achievement Motivation | 1 | 1 | 4 | 1 | 5 | 2 | 3 | 1 |
| Dependability | 1 | 1 | 3 | 1 | 5 | 2 | 1 | 1 |
| Narcissism | 1 | 1 | 2 | 1 | 5 | 2 | 1 | 1 |
| Narcissism (Bright Side) | 1 | 1 | 3 | 1 | 5 | 2 | 1 | 1 |
| Narcissism (Dark Side) | 1 | 1 | 2 | 1 | 5 | 2 | 1 | 1 |
| Resilience | 1 | 1 | 3 | 1 | 5 | 2 | 1 | 1 |
| Charisma | 1 | 1 | 3 | 1 | 5 | 2 | 1 | 1 |
| Self-esteem | 1 | 1 | 3 | 1 | 5 | 2 | 1 | 1 |
| "Dark side" Personality Traits | 1 | 1 | 2 | 1 | 5 | 2 | 1 | 1 |
| Self-confidence | 1 | 1 | 3 | 1 | 5 | 2 | 1 | 1 |
| Locus of Control | 1 | 1 | 3 | 1 | 5 | 2 | 1 | 1 |
| Machiavellianism | 1 | 1 | 2 | 1 | 5 | 2 | 1 | 1 |
| Self-monitoring | 1 | 1 | 3 | 1 | 5 | 2 | 1 | 1 |
| Cultural Tolerance | 1 | 1 | 2 | 1 | 4 | 2 | 2 | 1 |
| Action versus State Orientation | 1 | 1 | 3 | 1 | 5 | 2 | 1 | 1 |

Note. 1 = Not useful, 2 = Slightly useful, 3 = Somewhat useful, 4 = Useful, 5 = Very useful

Despite the limitations of biodata in personality assessment, biodata personality measures show convergent and discriminant validity with analog personality scales (Mael & Hirsch, 1993). Therefore, they have some usefulness as quasi-personality measures. In addition, some evidence indicates properly constructed biodata items are less fakable than personality measures (Stokes & Cooper, 2004). We rated structured biodata assessment *useful* (4), rather than *somewhat useful* (3), for achievement motivation because achievements tend to be more consistent with the boundaries of biodata items (e.g., more discrete, externally visible, and verifiable).

It should be noted that some of the "dark side" personality traits may be especially susceptible to faking and inflated scores, even in a developmental context. For example, narcissistic individuals are, by definition, self-deceived and would therefore bias their responses in a positive direction even if they firmly believed they were giving honest responses. The Hogan Development Survey (HDS; R. Hogan & J. Hogan, 2001), which measures non-clinical manifestations of DSM-IV personality disorders (including narcissism), has shown promising construct validity, however, and its website claims criterion-related validity against management competency criteria, so it may be a workable measurement solution.

Experience domain. Table 16 presents the usefulness ratings of different measurement methods for two experience KSAOs. The two experience KSAOs, past leadership experience and prior influence experience, can be measured by three measurement methods: (a) structured biodata assessment, (b) accomplishment record, and (c) experience inventory. It is difficult to say which of these three methods would be optimal. It is likely that tasks making up an experience inventory would simply be aggregated into behavior summary scales for an accomplishment record. The greater difficulty and labor-intensiveness involved in scoring accomplishment records is perhaps an argument in favor of an experience inventory. A structured biodata assessment would likely be as effective as an experience inventory, and there would probably not be much difference in the labor-intensiveness of their development and implementation unless the biodata scoring was based on empirical, rather than rational, keying. Since empirical keying is not likely to produce results superior to rational keying (Hough & Paullin, 1994), we recommend a rational keying approach for biodata.

As noted earlier, the literature review did not reveal existing measures of past leadership experience. A biodata assessment could be developed to measure past leadership experience, but there may not be incremental validity beyond measures of prior influence experience. Thus, it might be more efficient and cost-effective to adapt the existing measure of prior influence experience identified by the literature review (Atwater et al., 1999), since that measure may be more directly relevant to predicting influence strategies. Using information from the literature review and subject matter expertise (SME), an experience inventory could be crafted to capture the frequency with which officers engaged in influence-related behaviors believed to relate to the acquisition and successful application of influence capital.

Motives domain. Table 16 provides the usefulness ratings for different measurement methods of the three influence-relevant motives. The survey method was rated *very useful* (5) for measuring all three motives: possesses Army values, leadership self-efficacy, and motivation to lead. No other measurement approach received a rating higher than *somewhat useful* (3). Additionally, while leadership self-efficacy does not have a commercially available or existing

free measure, it should be relatively straightforward to develop a measure based on the extensive body of literature (e.g., Bandura, 1977; Chan & Drasgow, 2001; Ng, Ang, & Chan, 2008). Once a measure was developed, data should be collected to establish the reliability and validity of the measure in the relevant Army populations.

Table 16

Ratings of Measurement Methods for Experience and Motives KSAOs

| | Ability/ Aptitude Test | Self- Ratings | Biodata | JRKT | Survey | SJT | Accomplish- ment Record | Experience Inventory |
|----------------------------|------------------------------|------------------|---------|------|--------|-----|----------------------------|-------------------------|
| Experience KSAOs | | | | | | | | |
| Past Leadership Experience | 1 | 1 | 4 | 2 | 3 | 1 | 4 | 4 |
| Prior Influence Experience | 1 | 1 | 4 | 2 | 3 | 1 | 4 | 4 |
| Motives KSAOs | | | | | | | | |
| Possesses Army Values | 1 | 1 | 3 | 1 | 5 | 3 | 1 | 1 |
| Leadership Self-efficacy | 1 | 1 | 2 | 1 | 5 | 2 | 1 | 1 |
| Motivation to Lead | 1 | 1 | 3 | 1 | 5 | 2 | 1 | 1 |

Note. 1 = Not useful, 2 = Slightly useful, 3 = Somewhat useful, 4 = Useful, 5 = Very useful

Declarative knowledge domain. Table 17 summarizes usefulness ratings for different approaches for assessing declarative knowledge. SJTs and JRKTs were the only methods to receive ratings of *useful* (4) or *very useful* (5). JRKT was rated 5 (*very useful*) for technical and tactical knowledge, joint organization knowledge, and relevant geopolitical awareness and knowledge. The SJT method was rated as *useful* for technical and tactical knowledge and *very useful* for joint organization knowledge. The only declarative knowledge area for which JKTs were rated as being clearly more useful than SJTs was relevant geopolitical awareness/knowledge (5, *very useful* versus 3, *somewhat useful*).

Table 17

Ratings for Measurement Methods for Declarative Knowledge (Medial Determinants of Influence Performance)

| | Ability/ Aptitude Test | Self- Ratings | Biodata | JRKT | Survey | SJT | Accomplish- ment Record | Experience Inventory |
|--|------------------------------|------------------|---------|------|--------|-----|----------------------------|-------------------------|
| Social Knowledge Relevant to Influence | 1 | 1 | 2 | 3 | 3 | 4 | 1 | 1 |
| Technical and Tactical Knowledge | 1 | 3 | 2 | 5 | 1 | 4 | 2 | 3 |
| Joint Organization Knowledge | 1 | 2 | 1 | 5 | 1 | 5 | 2 | 2 |
| Knowledge of social norms | 1 | 1 | 1 | 3 | 2 | 5 | 1 | 1 |
| Knowledge of structures and systems | 1 | 2 | 1 | 3 | 2 | 5 | 1 | 1 |
| Knowledge of maladaptive perceptual biases | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Relevant Geopolitical Awareness/Knowledge | 1 | 2 | 1 | 5 | 1 | 3 | 1 | 1 |
| Knowledge of Differences in Core Cultural Values | 1 | 1 | 1 | 3 | 2 | 5 | 1 | 1 |
| Knowledge of Core Cultural Values | 1 | 1 | 1 | 3 | 2 | 5 | 1 | 1 |

Note. 1 = Not useful, 2 = Slightly useful, 3 = Somewhat useful, 4 = Useful, 5 = Very useful

A differentiating factor in whether JRKT or SJT is a more useful method is the extent to which the knowledge to be measured is best assessed with items that have multiple answers differing in their effectiveness (SJTs) or items that have one definitively correct answer (JRKTs). In addition, SJT is the method of choice when greater context is required in the item stem. When both measures received high ratings, it was because, in our judgment, both would generate valid information about examinees. For example, knowledge about joint organizations would seem to be amenable to multiple-choice items with a single correct response, without the need for a great deal of context. SJT items could, however, also be developed to measure joint organization knowledge when more context is required or more complexity needs to be embedded in an answer to address a more intricate or sophisticated understanding of a joint organization (e.g., what the roles are among multiple elements of a joint organization under different conditions).

Another reason why JRKTs and SJTs both received high usefulness ratings for certain knowledge areas is that several declarative knowledge areas overlap with procedural

knowledge/skill components. For example, technical and tactical knowledge could include such things as knowledge of characteristics of armaments and equipment (declarative knowledge) as well as conditions that lend themselves to selecting one tactic over another (procedural knowledge/skill). SJTs lend themselves more to measurement of procedural knowledge/skill, whereas JRKTs lend themselves more to declarative knowledge.

The literature review indicated no readily available measures for any of the declarative knowledge areas. However, it would be possible to develop and validate measures of each declarative knowledge area. In general, the knowledge areas can be categorized into technical knowledge and social/cultural knowledge. Technical knowledge may be easier to measure since the information may be readily available in technical manuals and other publications. Ideally, a combination of JRKTs and SJTs would be used. Measurement of socio-cultural knowledge areas (e.g., social knowledge relevant to influence), might benefit from a multimedia SJT approach. A successful attempt at measuring social knowledge using a multimedia SJT was created for ARI in 2005 (Schneider & Johnson, 2005).

Both SJT and JRKT approaches would require input from SMEs with the requisite military knowledge, in addition to the need for examinees and other resources necessary for appropriate validation, to ensure that the measure is appropriate and valid for its intended use. Cost and amount of SME time would increase depending on the level of fidelity with which knowledge is measured. Technical and tactical knowledge could be measured in a low-fidelity way using a multiple-choice JRKT, in a higher-fidelity way using a multimedia SJT, or in a very high-fidelity way using an elaborate simulator. In any of these cases, it would be important to determine the minimum fidelity required to achieve valid measurement. Research comparing measures differing in fidelity is in its infancy, so this determination would involve a good deal of professional judgment rather than reliance on existing research.

Procedural knowledge and skill domain. Table 18 summarizes the usefulness of different measurement approaches for the various procedural knowledge and skills identified in the literature review. The procedural knowledge and skill domain includes a variety of procedural knowledge and skills, and the most appropriate measurement method varies depending on what is to be measured. Ability and aptitude testing was rated most useful for measuring emotional intelligence, given that this report adopts the “ability model” approach to emotional intelligence definition and measurement.

Self-rated performance was rated *useful* (4) for oral communication, listening, and conflict management skills. One might argue that there would be little difference between surveys and self-rated performance for purposes of measuring these three skills. We rated self-rated performance higher because properly-constructed performance measures would be closer to actual behaviors than inventories designed to measure non-cognitive predispositions to behave in certain ways. Put another way, self-rated performance and skills fall closer to the sample end of the sign-sample continuum of measurement (Wernimont & Campbell, 1968). *Signs* are indicators of predispositions to behave in certain ways. *Samples* refer to the characteristic behavior of individuals. Examples of signs are traditional/conventional measures of cognitive ability, personality, and values. Examples of samples are work sample tests, and measures of experience with work-related tasks and activities.

Table 18

Ratings for Measurement Methods for Procedural Knowledge/Skills

| | Ability/ Aptitude Test | Self- Ratings | Biodata | JRKT | Survey | SJT | Accomplish- ment Record | Experience Inventory |
|--------------------------------|------------------------------|------------------|---------|------|--------|-----|----------------------------|-------------------------|
| Behavioral Flexibility | 1 | 1 | 2 | 1 | 5 | 4 | 1 | 1 |
| Situational Awareness | 2 | 2 | 1 | 1 | 3 | 4 | 1 | 1 |
| Political Skill | 1 | 3 | 2 | 1 | 4 | 5 | 1 | 1 |
| Perspective Taking | 2 | 1 | 1 | 1 | 4 | 3 | 1 | 1 |
| Frame Changing | 2 | 1 | 1 | 1 | 4 | 3 | 1 | 1 |
| Metacognitive Skill | 1 | 1 | 1 | 1 | 2 | 4 | 1 | 1 |
| Behavior Matching | 5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Emotional Intelligence | 4 | 1 | 1 | 1 | 3 | 2 | 1 | 1 |
| Emotional Awareness | 3 | 1 | 1 | 1 | 4 | 2 | 1 | 1 |
| Cultural Intelligence | 2 | 1 | 3 | 3 | 4 | 4 | 2 | 1 |
| Cultural Knowledge Acquisition | 3 | 1 | 1 | 1 | 4 | 2 | 1 | 1 |
| Social Problem Solving Skills | 2 | 1 | 1 | 3 | 2 | 4 | 1 | 1 |
| Social Metacognition | 1 | 1 | 1 | 1 | 2 | 4 | 1 | 1 |
| Conflict Management | 1 | 1 | 1 | 1 | 5 | 3 | 1 | 1 |
| Oral Communication Skills | 1 | 4 | 2 | 1 | 3 | 1 | 1 | 1 |
| Listening Skill | 1 | 4 | 2 | 1 | 3 | 1 | 1 | 1 |
| Tacit Knowledge | 1 | 1 | 1 | 3 | 1 | 4 | 1 | 1 |

Note. 1 = Not useful, 2 = Slightly useful, 3 = Somewhat useful, 4 = Useful, 5 = Very useful

The measurement methods with the greatest number of *useful* (4) or *very useful* (5) ratings for the various procedural knowledge/skills are surveys and SJTs. In some cases, both methods received high ratings for a given procedural knowledge/skill. In other cases, one method was preferred over the other. For instance, the survey was the method of choice in the case of emotional awareness. We reached this conclusion based in part on rational considerations (e.g., emotional awareness involves a predisposition to be attuned to the emotional cues of others, which may lend itself to a personality-style assessment) and in part on our own research (Johnson et al., 2008; Schneider & Johnson, 2005). It should also be noted that emotional

awareness, as defined in this project, also includes a component perhaps best measured by an ability/aptitude test, such as the MSCEIT.

The SJT was preferred over surveys in the cases of metacognitive skill, social problem-solving skills, social metacognition, and tacit knowledge relevant to influencing others. Marshall-Mies et al. (2000) used an SJT to measure social problem-solving and social metacognition in a military sample. The items they developed offer a compelling justification for use of a scenario-based (SJT) measurement approach for these particular KSAOs. For example, to determine causes of problematic social situations, it is necessary to be presented with context about the social situation. Identification of social errors, one aspect of social problem-solving skills, could probably be assessed without a scenario-based approach, but this would only measure a portion of that KSAO. Similarly, measurement of social metacognition requires too much context, in our judgment, to achieve construct validity without a scenario-based measurement approach. For example, one must describe an ill-defined social problem to determine whether an examinee can impose structure on the problem, identify issues that need to be considered, and generate viable solutions. It is hard to imagine a way to ask an examinee to identify important issues in a social problem and generate solutions without providing a scenario in which a problem is embedded.

Tacit knowledge relevant to influencing other individuals refers to knowledge that guides action in particular situations or classes of situations. As such, an SJT would be a useful method to measure tacit knowledge, because SJTs measure the courses of action individuals would take in a situation. Tacit knowledge has been measured using SJTs in research reported by Wagner and Sternberg (1985) and Hedlund et al. (2003), and we concur with their decision to use a scenario-based approach.

Both surveys and SJTs were rated *useful* (4) or *very useful* (5) for measuring behavioral flexibility, political skill, and cultural intelligence. These two methods provide complementary assessment of behavioral flexibility. For example, Paulhus and Martin (1988) developed a measure of interpersonal flexibility that also involved self-report assessment. They asked examinees how capable they were of displaying a given personality trait when a given situation requires it.

Part of the behavioral flexibility KSAO includes responding equally well to different situational demands. To assess behavioral flexibility adequately, items would need to describe situations with differing demands, followed by questions designed to determine how an examinee would respond in those different situations. Thus, assessing behavioral flexibility likely would require an SJT of some type. For example, Hackworth and Brandon (2006) provided participants with 14 situations and asked them to rate the likelihood they would use each of eight persuasion tactics in each situation. The more situations participants indicated they would be likely to use, the greater their social-cognitive flexibility was judged to be. Hackworth and Brandon's approach represents one example of an SJT, but many other variations of an SJT could be devised. For example, one problem with Hackworth and Brandon's approach was that it did not measure how well the participants thought they would do in each of the situations. In our view, this is an important aspect of behavioral flexibility that is ripe for innovative research.

Describing and understanding leadership situations would seem critical to providing optimal measurement of behavioral flexibility, as well as other KSAOs relevant to leader influence.

Political skill is a compound of a variety of KSAOs. Political skills have been measured in self-report survey format (Ferris et al., 2005), and the factor-analytic work Ferris et al. report indicates that political skill consists of more than one factor. Although the Ferris et al. political skill measure is a useful one, the requirement in the definition we have provided is that politically skilled individuals must "know precisely what to do in different social situations at work." Because of the emphasis placed on appropriate action in different contexts, an SJT might provide better assessment than surveys. That said, some aspects of political skill may be best assessed through surveys. For example, the definition indicates that in addition to knowing what to do in work situations, one must know "how to do it in a disarmingly charming, genuine, and engaging manner." This suggests that personality will play a role and, to the extent that it does, a survey would provide the best measurement.

It should be noted that, among the non-cognitive KSAOs woven into the fabric of political skill, some are likely to best be measured not by asking about typical behavior, but by asking about "maximal" behavior (Paulhus & Martin, 1987, 1988; Wallace, 1966). For example, while times will exist in which "true" genuineness will produce behavior consistent with political skills, there will be other times when demonstration of political skill will require a leader to *seem* genuine, even when he/she is not behaving consistently with his or her attitudes and beliefs. In such situations – those where a leader does what the situation demands, irrespective of her or his inner attitudes and beliefs – that leader is demonstrating genuineness as maximal performance. The measurement implication is that the best measure is a survey with a rating scale that measures the extent to which a leader is able to act genuine when he/she is, in fact, not being genuine.

Situational awareness, though it has been measured in self-report (e.g., Taylor, 1990), requires a relatively high-fidelity SJT for effective measurement because situational awareness involves perception of elements in a dynamic environment. That is, situational awareness requires not only being aware of elements of the present situation, but also predicting their status in the near future. The approach taken by Strater, Endsley, Pleban, and Matthews (2001), which involves freezing scenarios and then asking examinees questions about their knowledge of what was happening at the time of the freeze, would seem to be an excellent, albeit expensive and labor-intensive, measurement approach.

Perspective taking is similar in many ways to the attribute social perceptiveness-individual. It may seem odd to find one KSAO in the ability domain and the other KSAO in the procedural knowledge and skill domain. The reason for this is because some aspects of social perceptiveness appear to be ingrained traits that are hard to modify in a person, whereas other aspects of social perceptiveness appear trainable. It is, for example, possible to teach somebody that if they are in a conversation with someone looking repeatedly at his or her watch, it is likely that other person would like to end the conversation soon. The aspect of perspective taking that involves looking at things from the perspective of someone from another culture would seem to be largely trainable, though individuals with greater inherent social perceptiveness would likely learn more quickly and reach higher levels of perspective taking skill. We have placed

perspective taking and social perceptiveness-individual in different categories of the taxonomic model primarily to acknowledge that the ability to adopt the perspective of others contains both trainable and difficult-to-modify elements.

Frame changing, which involves switching from one frame of reference to another to interpret socio-environmental cues correctly, is a relatively novel concept, though it has been alluded to in previous discussions (e.g., LaFromboise, Coleman, & Gerton, 1993). The literature review did not reveal any existing measures of frame changing. Our sense, however, is that frame changing would best be assessed using an SJT since scenarios may be useful for stimulating and examining different frames of reference. However, a survey also might be feasible.

Self-regulation domain. Table 19 summarizes the usefulness ratings for different measurement methods for emotion control and impression management. The survey method was rated *very useful* (5) for both emotion control and impression management. No other method received a rating higher than *slightly useful* (2). Adequate measures of the two self-regulation KSAOs are readily available (e.g., Emotion Regulation Questionnaire – ERQ, Gross & John, 2003; Impression-Management Scale, Bolino & Turnley, 1999), but these are not military-specific measures.

Table 19

Ratings for Measurement Methods for Self-regulation KSAOs

| | Ability/ Aptitude Test | Self- Ratings | Biodata | JRKT | Survey | SJT | Accomplish- ment Record | Experience Inventory |
|--------------------------|------------------------------|------------------|---------|------|--------|-----|----------------------------|-------------------------|
| Emotion Control | 1 | 1 | 2 | 1 | 5 | 2 | 1 | 1 |
| Impression Management | 1 | 1 | 1 | 1 | 5 | 1 | 1 | 1 |

Note. 1 = Not useful, 2 = Slightly useful, 3 = Somewhat useful, 4 = Useful, 5 = Very useful

Leadership styles and competencies. Table 20 summarizes the usefulness ratings for the various leadership styles and competencies identified through the literature review as being related to leader influence. In general, leadership styles, which generally reflect consistent patterns of behavior aggregated across time and context, were deemed as measured well by a survey method that would ask leaders to report on whether they engaged in different behaviors associated with different leadership styles. Leadership competencies, which also can reflect higher-order patterns of behavior, also might be measured using a survey approach. However, since competencies also can reflect elements of the job performance domain (e.g., physical fitness is not a leadership style but is an important attribute of what an Army Leader must be as part of his or her job), self-ratings of performance with respect to leader competencies also seem a very useful avenue for measurement.

Table 20

Ratings for Measurement Methods for Leadership Styles/Competencies Related to Influence

| | Ability/ Aptitude Test | Self- Ratings | Biodata | JRKT | Survey | SJT | Accomplish- ment Record | Experience Inventory |
|-------------------------------------|------------------------------|------------------|---------|------|--------|-----|----------------------------|-------------------------|
| Leadership Style | | | | | | | | |
| Destructive Leadership | 1 | 1 | 1 | 1 | 4 | 4 | 1 | 1 |
| Transformational Leadership | 1 | 2 | 2 | 1 | 4 | 3 | 1 | 1 |
| Transactional Leadership | 1 | 2 | 2 | 1 | 4 | 3 | 1 | 1 |
| Leader-Member Exchange (LMX) | 1 | 2 | 2 | 1 | 4 | 3 | 1 | 1 |
| Leadership Competencies | | | | | | | | |
| Recognizes/Rewards Good Performance | 1 | 5 | 2 | 1 | 5 | 1 | 3 | 2 |
| Possesses Warrior Ethos | 1 | 5 | 2 | 1 | 5 | 1 | 3 | 1 |
| Physical Fitness | 1 | 5 | 2 | 1 | 5 | 1 | 3 | 1 |
| Possesses Military Bearing | 1 | 5 | 2 | 1 | 5 | 1 | 3 | 1 |
| Motivates Others | 1 | 5 | 2 | 1 | 5 | 1 | 3 | 3 |
| Coaches/Develops Subordinates | 1 | 5 | 2 | 1 | 5 | 1 | 3 | 3 |
| Builds Relationships | 1 | 5 | 2 | 1 | 5 | 1 | 3 | 3 |
| Leads Courageously | 1 | 5 | 2 | 1 | 5 | 1 | 3 | 3 |
| Fosters Open Communication | 1 | 5 | 2 | 1 | 5 | 1 | 3 | 3 |

Note. 1 = Not useful, 2 = Slightly useful, 3 = Somewhat useful, 4 = Useful, 5 = Very useful

While many leadership styles and competencies could be measured via survey, destructive leadership was identified as also being amenable to an SJT format (*useful, 4*). The SJT was rated as appropriate because Tepper (2000) noted that “the same individual can view a supervisor’s behavior as abusive in one context and non-abusive in another context” (p. 178). For example, treatment by a drill instructor of a new Army recruit might be abusive if looked at outside of the context in which it occurs. The relevance of context should be something that

supervisors as well as their subordinates would understand. As such, the SJT approach allows for context-specific information necessary for measuring destructive leadership. The SJT format also may alleviate some socially desirable responding because socially appropriate answers might be easier to obscure in an SJT format, which appears more as a hypothetical problem solving exercise, than in a self-report survey format, which may include judgment-laden items such as “My subordinates are not satisfied with their jobs.”

Transformational and transactional leadership can be measured via self-rated performance in a survey format. For instance, the most widely known measure of transformational and transactional leadership, the Multifactor Leadership Questionnaire (MLQ; Avolio & Bass, 2004; Avolio, Bass, & Jung, 1995; Bass & Avolio, 2000), uses a self-report survey. According to Buros’ 2004 *MMY*, the MLQ is valid across a number of cultures and types of organizations. It is easily administered, requires 15 minutes to complete, and has been extensively researched and validated. Of the KSAOs in this report, transformational and transactional leadership are the least in need of a new measure since an existing and extensively used measure is available.

Summary

Different approaches for measuring each influence KSAO were identified under the assumption that the measures would be employed as part of self-awareness and self-development interventions for Army leaders. Two assumptions were made: (1) self-development interventions might be implemented within a distributed learning framework, such that all measures should be easily self-administered, and (2) measures should be amenable both to paper-based and online administration. One or more measurement methods were rated as useful or very useful for 62 KSAOs, and most KSAOs had one measurement method rated as useful or very useful.

Recommendations for Training

This report reviewed strategies that military leaders can use to influence individuals within and outside the chain of command. The report also identified several knowledge, skills, abilities, and other characteristics that support different influence behaviors. The report discussed existing measures for influence strategies and associated KSAOs, and made recommendations for additional measurement of KSAOs. This section identifies the KSAOs amenable to training and effective training methods for developing these KSAOs. The discussion concentrates primarily on the topic of training needs and training methods, but touches briefly on other training design issues, including the development of training content and strategies for enhancing transfer (Campbell, 1988; Campbell & Kuncel, 2002). This section also discusses training programs that are currently used for developing influence skills.

Training Influence Skills

The extent of practitioner-delivered training options for developing influencing skills is quite impressive. A web-based keyword search using the terms “training influence/influencing skills” results in several pages of links to courses and programs offered by training professionals, executive coaches, and other practitioners. Many of these courses cover similar core content,

although they vary to some degree based on the target audience (e.g., senior executives, sales, cross-cultural engagements) and use of proprietary models, training frameworks, and technology. Fundamentally, most courses seek to educate leaders and others about basic principles of influence, different influence behaviors and strategies, the importance and role of establishing influence goals, and the value of building positive relationships. Many courses provide a list of training objectives. Table 21 shows four examples of training objectives captured from a random sample of practitioner-delivered training programs identified from an internet search.

While none of the training descriptions explicitly make a distinction between *applying* and *building* influence, the description of their training objectives capture a dual focus on both of these dimensions. In reviewing the training objectives, we attempted to classify each as one or the other. Much of the training appears to seek a balance between (1) educating leaders on the value of developing and using a repertoire of influence strategies, and (2) broader-based efforts to build interpersonal skills that are the foundation upon which trust, rapport, and social networks are based.

The precise number of available training courses is hard to estimate. Based on the keyword search and the many pages of results it produced, it seems that influence skills are a popular and important area for leader development. What a web-based search for individual programs does not highlight so readily is their *efficacy* with regard to actual enhancement of skills. In neither the practitioner nor academic literatures could we identify any research that either systematically compares different training methods or examines the overall effectiveness of training influencing skills in organizations. In large part, this likely reflects the diversity of training content, methods, technologies, and evaluation features used by different vendors.

Efforts have been made to quantify the relationship between training design and the effectiveness of training in organizations for the broader category of interpersonal skills training. Arthur, Bennett, Edens, and Bell (2003) conducted a meta-analysis based on a literature search of empirical research involving either the evaluation of training programs or measurement of aspects of their effectiveness. The authors classified the skills and tasks to be trained into three broad categories: cognitive, psychomotor, and interpersonal. According to Arthur et al., the latter relate to “interacting with others in a workgroup or with clients and customers. They entail a wide variety of skills including leadership skills, communication skills, conflict management skills, and team-building skills” (p. 236). While these skills are broader than those relating to influence, they are nevertheless relevant and shed light on whether it is efficacious to train interpersonal declarative and procedural knowledge.

Arthur et al. (2003) estimated the population effect size for training programs attempting to train interpersonal declarative and procedural knowledge is $d = .68$ for *learning* criteria (i.e., how much is learned from the program), $d = .54$ for *behavioral* criteria (i.e., changes in job-related behaviors or performance), and $d = .88$ for *results* criteria (i.e., utility of program to the organization). These findings suggest that knowledge related to interpersonal skills is highly trainable; however, training effectiveness also varies as a function of the training delivery method (e.g., lecture, audio-visual, discussion). The interpersonal skills training programs included in Arthur et al.’s meta-analysis used several different delivery methods, most of which were associated with medium to large effect sizes.

Table 21

Four Examples of Training Objectives from Practitioner-Delivered Training Programs

| Program 1 | Program 2 | Program 3 | Program 4 |
|--|--|--|--|
| <ul style="list-style-type: none"> • Understand differences in others (B) • Create individual action plans to develop individual persuasive techniques (A) • Understand opposition thinking styles (A) • Have confidence and knowledge to invent win/win outcomes for both parties (A) • Understand the importance of congruency in influencing others (A) • Communicate more effectively with different personalities (A) • Be confident of your objectives beforehand (A) • Understand different persuasion techniques (A) • Influence people in a desired direction (towards the light) and obtain commitment and assistance from key stakeholders (A) • Understand the importance of active problem solving (A) • Identify key stakeholders (B) • Use active listening and questioning to unearth critical information (A) • Interpret information quickly (A) • Understand the importance of a road map in using your influencing skills (B) • Use different influencing styles for diverse personalities and cultures (A) | <ul style="list-style-type: none"> • Principles of Influence (A) • Influencing Style (A) • Expanding your Spheres of Influence (B) • Compensation rather than Compromise • Personal Negotiation Strategy (A) • Making Impactful Briefings (A) • Creating the Right First Impression (B) • Using Pressure rather than Coercion (A) • Seeing the Other Point of View (A) • Using Status to Stay In Charge (B) • Knowing What to Give Away (A) • Creating a Circle of Champions (B) • Understanding Group Dynamics (B) • Giving Positive Feedback (B) | <ul style="list-style-type: none"> • Learn positive influencing language to use and how to say it (A) • Learn how to use body language and non-verbal communication to your advantage (A) • Learn how to understand the motivations of others (B) • Learn how to use the learning style and management style of others in order to influence (A) • Learn how to influence at meetings and during presentations (A) • Dealing with conflict strategies and turning these around (A) • How to get your point across without the waffle (A) • Learn how to build effortless rapport (B) • Building networks in and out of the workplace (B) • Building trust with people and how to do this (B) | <ul style="list-style-type: none"> • Apply influence strategies to gain commitment from others and foster collaboration (A) • Define desired outcomes for win-win results (A) • Dynamically adjust your approach to others to gain buy-in (A) • Achieve goals by enhancing trust and cooperation (B) • Deal effectively with challenging behaviors to overcome resistance and inertia in others (A) • Use knowledge and competence rather than position and status to influence others (B) |
| Source | | | |
| http://www.preftrain.com/training-programs/outlines/influencing-&-persuasion-techniques.php | http://www.impactfactory.com/p/influencing_skills_training_development/issues_943-2103-87483.html | http://www.executivecoachingstudio.com/influencingskillstraining.htm | http://www.learningtree.com/courses/294qa.htm |

Note. (A) = Applying Influence training objective; (B) = Building Influence training objective.

Trainability of KSAOs

The first step in developing a training program is to determine training needs. In the current context, training needs can be understood as the determinants of influence performance that are capable of being trained (Campbell, 1988; Campbell & Kuncel, 2002). Typically, these trainable elements include declarative knowledge (i.e., knowledge of how to do something), procedural knowledge/skill (i.e., skill in applying declarative knowledge), attitudes, and other characteristics (Campbell, McCloy, Oppler, & Sager, 1993).

Of the many influence KSAOs, some are clearly capable of being trained. For instance, countless investigations have demonstrated the trainability of influence-related declarative and procedural knowledge and skills. To provide one example from the meta-analytic literature, Stuhlmacher and Waters (1999) reviewed the findings of 21 investigations that successfully taught negotiation knowledge and skill. Negotiation may be considered a specific form of influence, and the findings from this meta-analysis suggest that such knowledge and skill can be trained. More generally, meta-analyses have confirmed that declarative and procedural knowledge related to a broad class of interpersonal skills, from communication to teamwork to supervisory skills, are capable of being trained (e.g., Arthur et al., 2003).

Training self-regulation of proactive and conscious processes also seems viable, though such training will likely be more difficult than training influence-related declarative and procedural knowledge. One example would be training self-regulation of emotions, one of the key online processes requiring regulation for influence strategies to be successfully implemented. Emotional regulation can be defined as all of the conscious and unconscious strategies one uses to increase, maintain, or decrease one or more components of an emotional response. Potentially, such regulation could involve increasing positive feelings, decreasing positive feelings, increasing negative feelings, and decreasing negative feelings (Carver & Scheier, 1998; Gross, 1998). According to one process model of emotion regulation (Gross, 1998), two broad sets of strategies for regulating emotions exist. *Antecedent*-focused strategies refer to strategies an individual invokes before response tendencies have become activated. Such strategies involve changing one's *perception* of an emotion-generating event prior to the event occurring in the hope that the emotion that is normally associated with the event does not occur. *Response*-focused strategies, in contrast, occur after an emotion has occurred. The purpose of response-based strategies, therefore, is not to prevent the internal experience of the emotion, but to suppress its expression.

A significant body of research indicates that both antecedent- and response-based methods can be used to regulate emotions, but that they have different affective and cognitive consequences. With regard to affective consequences, research confirms that antecedent-based strategies are effective in changing both the inner experience of the emotion *and* the expression of the emotion, whereas response-based strategies typically only affect the expression of the emotion (Gross & Levenson, 1993, 1995). With regard to cognitive consequences, one key question has been whether the use of either of these broad sets of strategies interferes with the ability of individuals to concurrently perform other tasks. In general, researchers have found that antecedent-based, but not response-based, emotion regulation occurs without affecting the attentional resources that otherwise are needed for task performance (Richards & Gross, 2000;

Gross & John, 2003). In addition, research indicates it may be possible to automate the self-regulatory process, thereby minimizing the risk that emotional self-regulatory processes will interfere with concurrent task performance (Gallo, Keil, McCulloch, Rockstroh, & Gollwitzer, 2009). In sum, the research on self-regulation indicates that the inner experience of emotions can be changed by using antecedent-based strategies, and antecedent-based strategies can probably be automated so that emotion regulation does not interfere with the task of influencing others.

The trainee's values, interests, and preferences also should be considered. While many of these characteristics are fairly stable within a person and cannot be readily changed, it is possible that the motivation to influence others can be enhanced through training. One of the most powerful training tools for enhancing motivation in any performance domain is goal setting. In goal setting research, the consistent finding in work settings is that inducing employees to have specific, difficult, and achievable goals leads to superior effort, investment, and performance over simply asking employees to do their best (Locke & Latham, 1990). As such, it may be possible to develop a training intervention that makes influencing others a goal.

Relatively stable "person" characteristics, such as cognitive ability and personality traits, would be difficult to modify in a training context. Theoretically, it is possible that an educational intervention could influence the development of these traits. However, any training intervention that could develop or modify these types of personal characteristics would be a highly specialized program of very long duration.

Thus, trainable KSAOs include (1) influence-related declarative knowledge, (2) influence-related procedural knowledge/skill, (3) self-regulation of proactive and online processes, (4) and motivation to influence others. Declarative knowledge of the influence process itself was also added, as modeled in Figures 1, 2, and 3.

Training Content and Methods

Development of content for influence training will involve specifying training objectives and, for each training objective, the specific facts, concepts, principles, skills, and patterns of behavior to be trained. Content related to acquiring and maintaining knowledge of influence-relevant facts, principles, and concepts will include much of the influence-related declarative knowledge contained in Table 7. Table 7 summarizes many of the relevant influence terms, concepts, and processes in the influence process, including knowledge of organizational structures and systems within the Army, knowledge of maladaptive perceptual biases, relevant geopolitical awareness/knowledge, and the like. For trainees to acquire the skill-based objective of learning *how* to influence effectively, they will need to learn most of the skills contained in Table 6. Some of the important influence-related skills to be learned include behavioral flexibility, situational awareness, political skill, perspective taking, frame changing, and metacognitive skill.

With respect to affective objectives, two objectives include enhancing influence self-efficacy and developing a mastery orientation toward learning influence knowledge and skill. Finally, the required content for meeting the emotion self-regulation objectives would include, at a minimum, specification of all of the influence-relevant emotions to be regulated in the course

of the influence process, relevant emotion regulation techniques, and principles for recognizing how and when to use these regulation techniques in the course of influencing others.

The next important consideration is which training method, or combination of training methods, should be used to address the identified training needs. At the most abstract level, a training *method* represents a structural relationship between instructor, learning, and the material to be learned that dictates *how* the content of instruction is to be taught (Reigeluth, 1999). The major training methods include information presentation (frequently in a lecture format), modeling, discovery, cooperative, tutorial, and independent learning. Each of these basic methods encapsulates a host of secondary methods, and each is premised on a different theory of learning. For instance, the “lecture” method has its roots in the expository theory of learning developed by Ausubel (1963), who believed people acquire knowledge primarily through reception of information that is clear and well organized. In contrast, modeling has its roots in social learning theory, which posits that learning can take place by watching others perform a behavior (Bandura, 1965). Finally, the discovery and error-based methods have their roots in the work of Jerome Bruner (1966), who believed learning is optimized by allowing learners to discover rules and principles for themselves. Bruner’s work presaged the cognitive constructivist revolution in educational psychology, currently the dominant framework for learning (Mayer, 2004). The central premise of constructivism is that learning is an active process that requires learners to struggle with, organize, and elaborate to-be-learned material.

A given training method may employ a variety of training media, such as videotapes, workbooks, the Internet, or multimedia (Campbell & Kuncel, 2002). Table 22 provides a summary of primary training methods, secondary training methods, and media. In choosing a training method, two considerations are paramount: (a) the instructional events that comprise the method should support or be consistent with the cognitive, physical, or psychomotor processes that lead to mastery; and (b) the capability incorporated in the training objective should be reflected as closely as possible in the training method (Campbell, 1988; Campbell & Kuncel, 2002). The review that follows examines which training methods are optimal for training interpersonal skills such as influencing others. Although little research has examined the efficacy of different training methods for training influence-related knowledge and skill specifically, much research has examined the effectiveness of different training methods for training the broader class of interpersonal skills to which the influence process belongs. This research provides the foundation for making recommendations concerning training method selection. Methods for training interpersonal skills are the focus of this discussion because the vast majority of the skills to be taught, including behavioral flexibility, situational awareness, political skill and the like, are interpersonal skills. However, some of the skills that need to be taught may not be interpersonal in nature. Accordingly, training method selection may differ somewhat for this limited pool of skills.

Behavioral modeling training (BMT) has been a popular method of training interpersonal skills. Millions of managers have been taught supervisory and communication skills using BMT (Wexley & Latham, 2002). Behavioral modeling has its roots in social learning theory, which posits that learning can take place by virtue of watching others perform a behavior (Bandura, 1965). Typically, individuals receiving behavioral modeling instruction are taught by a trainer in a group setting. In that group, trainees receive an introduction to a topic, watch a model perform

the desired behaviors, discuss what the model did right and wrong, practice the desired behaviors via role playing, and receive feedback about their performance.

The popularity of BMT for interpersonal skills is due in large part to a series of early investigations suggesting its efficacy (e.g., Latham & Saari, 1979; Meyer & Raich, 1983) and recent meta-analyses supporting its use in training these skills (Burke & Day, 1986; Falcone, 1985; Taylor, Russ-Eft, & Chan, 2005). In their recent meta-analysis of BMT, Taylor et al. (2005) found large effect sizes for BMT on interpersonal knowledge and skill outcomes. Among research employing control groups, the mean population effect size estimate was slightly more than one standard deviation, which is comparable to those found in earlier meta-analyses for similar criteria (Arthur et al., 2003; Burke & Day, 1986). The mean population effect size estimate for attitudes was smaller, but still substantial, with an average change of one third of a standard deviation. Finally, the estimated population effect size for on-the-job performance behavior was approximately one quarter of a standard deviation. The effect size was smaller than the results reported in other meta-analyses for this criterion (Arthur et al., 2003; Burke & Day, 1986; Guzzo, Jette, & Katzell, 1985), which the authors attributed to the inclusion of more recent research showing smaller BMT effects on behavioral outcomes (May & Kahnweiler, 2000; Russell, Wexley, & Hunter, 1984; Werner, O'Leary, Baldwin, & Wexley, 1994), and the inclusion of a greater number of unpublished investigations than previous meta-analyses.

Despite positive results for behavioral modeling, questions about its effectiveness remain. Several investigations failed to find positive effects for BMT on outcomes such as on-the-job behavior (May & Kahnweiler, 2000; Russell, Wexley, & Hunter, 1984; Werner, O'Leary-Kelly, Baldwin, & Wexley, 1994). In addition, some commentators urge caution in drawing conclusions about the effect of BMT on skill acquisition (i.e., procedural knowledge) and transfer of interpersonal skill (Baldwin, 1992; Parry & Reich, 1984). Much research has used paper-and-pencil situational judgment tests, rather than simulation tasks, as their skill-based measures (Taylor et al., 2005).

Other methods of training interpersonal skills have been implemented. For instance, interpersonal skills have been taught using the lecture method, programmed instruction, discussion, and various combinations of these methods. In their meta-analysis of the effectiveness of different training methods for teaching different categories of skills, Arthur et al. (2003) found a wide range of effect sizes for these training methods and combinations of methods for teaching interpersonal skills. The effect sizes varied considerably (i.e., from $d = .22$ to $d = 1.44$) depending on whether reaction, learning, or behavioral criteria were employed.

Table 22

Instructional Methods and Structural Attributes of Methods

| Basic Methods | Attributes | Secondary Methods | Training Media |
|---|---|--|--|
| Lecture | Instructor delivers material directly to multiple learners | None | |
| Modeling | Instructor provides a demonstration directly to multiple learners | Role Playing | <ul style="list-style-type: none"> • Workbooks • Videotapes • Audiotapes |
| Discovery <ul style="list-style-type: none"> • Individual • Group | Instructor uses a resource-based learning activity; He/she is only indirectly involved, while learner(s) are directly involved. | Constructivist Inquiry Learning Problem-Based Learning | <ul style="list-style-type: none"> • CBT • CD-ROM • Videoconferencing |
| Cooperative | Instructor uses a problem-based learning activity; He/she is only indirectly involved, while learner(s) are directly involved. | Team Training Jigsaw Reciprocal Questioning Scripted Conversation | <ul style="list-style-type: none"> • Multimedia • Audio-conferencing • Videodisks |
| Tutorial | Instructor discusses material with learner(s), relying on interaction as a means to build on material to be learned. | Cognitive Apprenticeships Instructional Conversations | <ul style="list-style-type: none"> • EPSS • Internet • Intranet |
| Independent | Learner takes a lead role in the instructional resource, relying on only the indirect involvement of an instructor. | Programmed Instruction Computer-Based Instruction | |

Another method for training interpersonal skills is error management training (EMT). Error management training is an approach to skill acquisition pioneered by cognitive psychologists, primarily in the educational domain (e.g., Brooks, 1990; Fosnot, 1996). The central premise of EMT is that learning complex, cognitively-laden skills is best accomplished in an environment in which trainees actively engage in exploration, problem solving, hypothesis testing, making mistakes and learning how to recover from mistakes (Ivancic & Hesketh, 1996). In contrast to a behavioral modeling approach in which the focus is on guiding learners in an errorless, step-by-step fashion through a pre-established set of training material, the focus in an error-based approach is on reducing training content, increasing participant involvement, and encouraging errors.

In general, research has supported the efficacy of EMT in fostering learning. For instance, several investigations have reported medium to large effect sizes for EMT relative to other proceduralized training methods that advocate step-by-step instructions and the avoidance of errors (Frese, 1995; Nordstrom, Wendland, & Williams, 1998; Wood, Kakebeeke, Debowksi, & Frese, 2000). In a meta-analysis of EMT, Keith and Frese (2008) found that deliberately incorporating errors into training can be an effective means of promoting learning. However, the training tasks included in much research, as well as in the meta-analysis, were confined to a narrow range of tasks. In most cases, the training involved using a new computer software package. None of the research in the Keith and Frese (2008) meta-analysis examined the effectiveness of EMT for training a complex interpersonal skill such as influence.

Both BMT and EMT make important theoretical arguments as to why they contribute to learning outcomes. The chief benefit of an error-based approach is that it forces individuals to generate and test hypotheses about a learning situation, thus increasing the cognitive load and depth of processing (Chandler & Sweller, 1991). Greater depth of information processing, in turn, leads to better encoding of information and recall (Craig & Lockhart, 1972). EMT also may promote more controlled, as opposed to automatic, processing of information (Ivancic & Hesketh, 1996) because errors that occur during the training increase the attentional resources devoted to understanding the error. More controlled processing may play a role in how well principles are learned (Sweller, 1988). A third argument for EMT is that errors are a source of negative feedback, and such negative feedback may be necessary for learning (Frese & Zapf, 1994; Heimbeck, Frese, Sonnentag, & Keith, 2003).

In contrast, BMT is argued to be more efficient than EMT, as social learning theory views errors as needless and time consuming (Keith & Frese, 2008). While EMT promotes inefficiency by focusing on errors, and either intentionally or unintentionally steering trainees down wrong paths, BMT maximizes efficiency by focusing on relevant content only. Second, BMT is argued to lead to more meaningful engagement with the material to be learned. From the standpoint of social learning theory, errors are harmful for learning because they take away from “on-task” time, thereby reducing the amount of information learned. BMT avoids this problem by focusing only on the material to be learned. Almost all learning in the BMT condition is “on-task” time. Third, BMT is argued to better motivate trainees to learn than EMT. In a BMT condition, trainees are motivated to learn because the feedback focuses on the positive aspects of a learner’s behavior and is positively reinforcing (Taylor et al., 2005). In contrast, according to reinforcement theory (Skinner, 1968), the errors built into EMT constitute a form of

“punishment” that may generate a host of negative emotions during training, including anger and despair (Heimbeck, Frese, Sonnentag, & Keith, 2003).

Cullen, Muros, Rasch, and Sackett (2009) investigated the relative effectiveness of BMT and EMT for developing negotiation skills for junior Army leaders. Results indicated that neither method was superior to the other in promoting near- or far-term declarative or procedural knowledge acquisition, retention, or transfer. However, the research revealed two sets of disordinal interactions. For several learning outcomes, performance of highly conscientious and extraverted individuals was superior in the EMT condition, while performance of less conscientious and introverted individuals was superior in the BMT condition.

The Cullen et al. (2009) research suggests that the function of errors in interpersonal skill acquisition is a complex one. The avoidance of errors in the BMT program did not appear to either help or hurt learning relative to the EMT program which explicitly relied on the occurrence of errors to promote learning. Thus, at least for the complex interpersonal skill of negotiation, research does not appear to fully vindicate reinforcement theory or social learning theory in the case of BMT, or a cognitive perspective in the case of EMT. From a practical perspective, the research has two implications. First, it suggests that both methods may be fruitfully used for training complex interpersonal skills such as negotiation or more generally, influencing others. Second, it reinforces the point stressed by many other researchers (Campbell, 1988; Campbell & Kuncel, 2002; Ford & Weissbein, 1997; Tannenbaum & Yukl, 1992) that it is important to resist a “one size fits all” approach to training. Individual differences can have an important impact on relevant training outcomes, and thus individual differences ought to be incorporated into the leader needs assessment process.

In general, it appears that BMT is the best training method for addressing the training needs and objectives of influence training. Not only has BMT been demonstrated to be an effective training method for training interpersonal declarative and procedural knowledge, it could be an effective method for training the somewhat novel self-regulation techniques required for effective influence. It is anticipated that having individuals model effective and ineffective self-regulation techniques, and having trainees intensively practice using these techniques themselves in realistic mock influence settings, will be highly effective because it directly incorporates the “capability” to be trained. In the case of the emotion regulation strategies, that capability is the ability to effectively implement emotion regulation strategies in real-world contexts where influencing others is required. As mentioned earlier, to meet the affective training objectives for the training needs in this project, it is recommended that goal setting and mastery-oriented training modules be included in the BMT intervention.

Enhancing Transfer

Training that does not result in transfer of skills to the workplace has minimal utility. This section discusses ways to optimize the transfer of influence-relevant knowledge and skills taught in training. Especially within the SSTR context, transfer of influence-relevant declarative and procedural knowledge is a key concern. In order to achieve tactical and strategic success through influencing others, Army leaders need to be able to know how to apply the knowledge and skills learned to constantly changing, asymmetrical contexts.

Conceptually, two types of transfer can be distinguished. Analogical transfer refers to situations where the problem is familiar or analogous to those of the training tasks. In contrast, adaptive transfer involves using what has been learned for a new problem that is structurally different than the one presented in training (Keith & Frese, 2008; Ivancic & Hesketh, 1996). Ideally, to enhance both types of transfer, a training method will include opportunities for goal setting, guided practice, and informational feedback (Ericsson & Charness, 1994; Kluger & DeNisi, 1996; Locke & Latham, 1990). Whenever possible, it should also foster the development of self-efficacy, a mastery-oriented approach to learning, and interest in the material. Such characteristics have been demonstrated to positively affect various learning processes, such as motivation to learn, information processing, and the use of metacognitive strategies, which in turn positively affect both short and long-term learning (e.g., Ford, Smith, Weissbein, Gully, & Salas, 1998; Gist, Stevens, & Bavetta, 1991; Mathieu, Tannenbaum, & Salas, 1992; May & Kahnweiler, 2000; Noe & Schmitt, 1986). Incorporating opportunities for active learning via intensive exploration of material has been shown to play an important role in fostering adaptive transfer in particular (Keith & Frese, 2008).

Consequently, it is recommended that influence training utilize BMT programs that contain multiple opportunities for (1) active engagement with and exploration of the material, (2) practice using the skills learned, (3) feedback, (4) enhancement of learner self-efficacy, (5) goal-setting, and (6) development of a mastery orientation towards learning. Together, these instructional events will help learners process information deeply, feel confident about their ability to influence others, and develop a sustained and continuing interest in developing their influence skills.

Summary of Training Recommendations

The review identified five training needs linked to the influence model presented in this report. The training needs include the following: (1) declarative knowledge of the influence process; (2) declarative knowledge of influence-relevant facts, concepts, and principles (see Table 8), (3) procedural knowledge of how to apply influence-relevant knowledge (see Table 7); (4) self-regulation of proactive and online processes; and (5) motivation to influence others. An important first step in creating an influence training program will be to translate these fairly general training needs into more specific training objectives capable of being evaluated. Identifying training objectives will be a central task of the training development process. The extent to which training content covers different KSAOs in the influence model will largely be determined by the specification and breadth of training objectives. Training content must be developed to address the training objectives, and focus groups with military subject matter experts may be useful in generating content that is relevant to both training objectives and the working conditions Army leaders are likely to encounter.

To deliver training content and meet training objectives, it is recommended that influence training be delivered primarily through a behavioral modeling method. Skill-based training objectives, in particular, will be best taught using BMT. BMT allows trainees to model effective and ineffective influence behaviors, practice employing those behaviors, and receive constructive feedback to hone influence skill. If a multi-phased program is developed to grow leaders' influence capabilities across their lifecycle, multiple methods could be incorporated across the development process to utilize both institutional and self-development learning approaches. For

instance, many of the training objectives related to declarative knowledge acquisition and retention can be met through information presentation and could be designed into a web-based training program. In sequencing these materials over time, as per research on training theory and the advice of training researchers, it is recommended that basic declarative knowledge be taught first, procedural knowledge be taught second, and that the affective objectives be taught once declarative and procedural knowledge has been attained.

In order to maximize retention and transfer, it is recommended that declarative knowledge, procedural knowledge, and affective instruction incorporate several features to the greatest extent possible: active learning, multiple opportunities to actively explore the material, practice, and feedback. Additionally, goal setting and mastery-orientation interventions can increase trainees' desire to use the influence behaviors learned and to inspire trainees to continue to improve influence knowledge and skill. Finally, a formal evaluation of the training program is advocated. For example, the assessment process employed by Cullen et al. (2009) in their negotiation research could be useful. In that research, Cullen et al. assessed four different measures of learning over time: (1) declarative knowledge acquisition, (2) task performance, (3) declarative knowledge retention, and (4) transfer performance. Their measures of declarative knowledge acquisition and task performance were administered immediately following training, and their measures of declarative knowledge retention and transfer performance were administered about one month after training had concluded.

Summary and Conclusions

This report described leader influence and used this description as a foundation for exploring KSAOs related to influence. In some ways, this task is deceptively straightforward since influence is so central to effective leadership in both commercial and military contexts. Indeed, FM 6-22 *Army Leadership* identifies influence as a critical element of leadership, and Soldiers at all ranks are expected to extend their influence in multiple directions. In other ways, however, influence is more than a behavior in a static point in time. Influence represents both a process and a system of variables that impact that process. To ensure military leaders are effective at influence across the variety of contexts in which they function, training and assessment should address both the behaviors used to influence and the knowledge and skills that support effective execution of influence strategies.

Power and Influence Tactics

The literature review began with a discussion of the importance of leader power, and a significant body of research focused on types of power the influencer may have that enables him/her to affect outcomes. These bases of power stem from different aspects of the relationship between an influencer and a target. The power leaders have to influence others comes from a variety of different sources and can lead to different outcomes. For example, while the application of legitimate power is well within expectations for a leader to use, research suggests that using power bases such as referent and expert power are more likely to result in commitment versus compliance with the request. Army leadership doctrine suggests compliance is a sufficient goal in certain critical situations, and application of legitimate power is appropriate in those instances.

Taking a broader focus, research on social capital suggests that the benefits of referent power should be leveraged within the leader's surrounding social network, building a system of resources through trust and support within the social structure. Leaders should not consider power as merely an exchange between two people; Power also occurs at a macro-level, and leaders should consider growing the social capital network around them and building power that results in commitment. The benefit of commitment is loyalty to the leader and the leader's request, as well as a higher level of effort sustained to meet and exceed requirements.

In addition to bases of power, the literature review explored the influence concept itself, examining several models of influence and research related to influence and persuasion. Eleven proactive influence tactics appear to sufficiently describe influence in the corporate workplace. The tactics can be organized into two higher-order categories: hard and soft tactics. Tactics also leverage personal and positional power, and these two types of power depend on the relationship between the influencer and a target.

While the 11 proactive influence tactics may be useful tools for Army leaders, current missions require that leader influence extend beyond the formal chain of command. The proactive influence tactics and techniques listed in Army leadership doctrine include nine techniques that overlap with the list of 11 corporate proactive tactics, but also include one tactic, relationship building, that does not appear in the list of 11. In addition, persuasion tactics and impression management tactics are not fully captured in the list of 11 tactics. These persuasion tactics leverage ingrained properties of human behavior to motivate an individual's behavior in a certain direction. Impression management is relevant to leader influence, as well, given that others' perceptions can impact a leader's status and ability to influence. Army leaders must maintain impressions of competence and effectiveness in order to influence others. Research suggests both persuasion and impression management tactics can be very powerful and should be integrated into the list of influence tactics/techniques and leveraged by Army leaders.

With respect to outcomes, the review suggests that hard influence tactics (pressure, coalitions, legitimating) are more likely to result in compliance; whereas soft tactics, particularly rational persuasion, inspirational appeals, and consultation, result in higher commitment and are more effective. Applied to the military, the use of legitimating tactics may be viewed as appropriate and sufficient under high stress situations, where compliance may be viewed as a sufficient outcome. Influence attempts, regardless of the tactic used, however, were more likely to result in favorable outcomes when the influence agent had high referent power, an effect that was independent of the tactics and the content factors (Yukl et al., 1996). Research also suggests applying multiple tactics in combination is useful, rather than using just a single tactic. Current research, however, fails to delineate best approaches for leaders to combine and sequence tactics.

In addition to power and proactive influence tactics, a number of content and contextual factors affect the relationship between influence attempts and influence outcomes. Context factors include the target of the influence (e.g., supervisor, peer, subordinate), content-related factors of the request itself (e.g., the importance of the request and the level of enjoyment gained or resistance to complying with the request), the influencer's skill in applying the tactic, and social norms or expectations for applying the tactic. Given the large number of factors that

impact influence outcomes, it becomes clear that predicting an influence outcome is based on an entire system of variables. Therefore, although research has provided a significant amount of information regarding the effects of power and influence tactics, ambiguity still exists regarding the best sequence of tactics to apply for any given situation. Similarly, how leaders identify and evaluate the relevant situational factors has not been investigated in the influence literature. One line of research might involve conducting a cognitive task analysis using effective influencers to better understand the situation evaluation process. Lastly, the predominance of the literature has been conducted using corporate civilian samples, so understanding situations specific and unique to the military is a challenge.

Models for Influence Processes

Based on the interrelationships identified in the literature review, a key distinction exists between two major influence processes: building influence capital and applying influence strategies. Both of these processes are critical to effective influence performance, and because they involve different antecedents, they should be modeled separately. Building influence capital is the consequence of the actual or perceived power that an individual holds, which can come from a variety of internal and external sources. Alternatively, applying influence refers to the proactive influence process of attempting to affect another's behaviors or beliefs. This report presented two process models that seek to describe how different elements from the literature review can be integrated to represent an influence operating system.

Similar models of applying influence can be found elsewhere as a means to describe how people evaluate a situation and select and apply influence strategies to address the goals at hand (e.g., Mueller-Hanson et al., 2007). However, the model depicting the process of building influence capital – while representing a relatively simple concept – is neither well-described in the literature nor currently applied explicitly in leader influence training. This is despite the fact, for example, that the concept of building rapport to increase referent power is generally well-accepted. Indeed, Ramsden Zbylut et al. (2009) found a correlation between rapport building and ratings that host nation counterparts were more accepting of security force advisor advice. Nevertheless, less attention has been paid to building the other bases of power. Further, these power bases are critical to the application of influence tactics, and it is worthwhile to develop a better understanding of how Army leaders can build or acquire influence capital.

KSAOs and Training

A starting point for improving influence performance is identifying the KSAOs that are related to leader influence. Understanding these KSAOs provides a critical foundation for selection and training recommendations. The literature review identified 64 KSAOs related to leader influence. A framework based Campbell's (1990; Campbell, McCloy, Oppler, & Sager, 1993) model of job performance was used, and KSAOs falling within the categories of distal, medial, and proximal determinants of influence behavior were discussed. An extensive search to identify measures of as many KSAOs as possible was also conducted. The search surfaced a wide range of commercial and public domain measures across KSAOs.

While current measures for the KSAOs are available, this report provided recommendations about the usefulness of different measurement approaches for each KSAO. We

rated each measurement approach for its usefulness in measuring each KSAO, and found that one or more methods were rated as useful or very useful for 97% of the KSAOs. Thus, a number of options are available for measuring KSAOs with either existing instruments or new instruments.

Finally, the report identified KSAOs amenable to improvement through training and the most effective training methods for developing these KSAOs. Specific training needs, objectives, content were linked to the influence framework, and relate primarily to procedural and declarative knowledge. Recommendations were made for developing a multi-phased program to grow leaders' influence capabilities across their career, using multiple methods that are incorporated across their development process through both institutional and self-development approaches. Training objectives related to declarative knowledge acquisition and retention can be met through information presentation and could be designed into a web-based training modules. Because many of the KSAOs amenable to training are those that are skill-based, behavioral modeling training may be an effective method for teaching influence skills for Army leaders.

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Appendix A

Extended List of Influence Strategies and Tactics

| Strategy/Tactic | Definition/Example | Source |
|--|---|---|
| Altercasting (Negative) | Leader tells target that only a person with "bad" qualities would fail to comply (e.g., leader tells target that only officers with poor leadership qualities would be unable to accomplish the influence goal). | Marwell, & Schmitt (1967) |
| Altercasting (Positive) | Leader tells target that a person with "good" qualities would comply (e.g., leader tells target that since target is mature and intelligent, leader has no doubt target will be able to accomplish the influence goal). | Marwell, & Schmitt (1967) |
| Appeal to Higher-Level Authority | Leader goes over target's head to induce compliance. | Cialdini (2007); Levine & Wheelless (1997); Rule, Bisanz, & Kohn (1985); Yukl (2006). |
| Apprising | Explaining the benefits of the leader's request to the target as an individual. | Yukl (2006) |
| Aversive Stimulation | Leader continuously punishes target, making cessation contingent upon compliance. | Marwell, & Schmitt (1967) |
| Blocking | Preventing the target from accomplishing another goal. | Yukl (2006) |
| Cooperation | Leader offers to work together with target to gain compliance (e.g., offers to negotiate, compromise, provide assistance/resources; solicits target input; treats target as an equal, despite differences in status); establishes and maintains rapport with target to facilitate working relationship. | Levine & Wheelless (1997) |
| Criticism-Based Appeal | Before asking target to do something, leader attacks target on a personal level, making target feel bad or insignificant. | Rule, Bisanz, & Kohn (1985) |
| Describing Multiple Equally Positive Choices | Leader indicates that each of two or more choices is equally valuable, and equally likely to lead to positive consequences. | Ojanen (1996) |
| Describing Single Positive Choice | Leader indicates that one course of action is positive, natural, or necessary. | Ojanen (1996) |
| Direct Request | Leader asks directly for target's cooperation. | Rule, Bisanz, & Kohn (1985) |
| Disclaimer | Leader very nicely asks target to comply and explains he/she doesn't want to be pushy but wants to at least ask. | Levine & Wheelless (1997) |

| Strategy/Tactic | Definition/Example | Source |
|------------------------------|---|--|
| Disrupt-Then-Reframe | This technique persuades by disrupting an individual's understanding of and resistance to an influence attempt and reframing the persuasive message or request so that the individual is left more vulnerable to the proposition. | Cialdini & Goldstein (2004) |
| Emotion-Based Appeal | Leader uses emotion to elicit target's cooperation (e.g., shows frustration, expresses pride). | Rule, Bisanz, & Kohn (1985); |
| Empathic Understanding | Leader expresses an understanding of the target's point of view in order to obtain compliance. | Levine & Wheelless (1997) |
| Establishment of Authority | Establishing one's authority to make the request. | Cialdini (2007); Yukl (2006). |
| Expertise-Based Appeal | Leader uses facts, evidence, or other knowledge to elicit target's cooperation. | Rule, Bisanz, & Kohn (1985); Yukl (2006) |
| Fear-Then-Relief | This tactic persuades by inducing "false fear" in targets (i.e., inducing fear followed by the revelation that the fear was unfounded). This makes targets more likely to comply with a request than those who continue to be fearful or were never fearful in the first place. | Cialdini & Goldstein (2004) |
| Feedback | Leader tells target to comply so leader knows if target understands how to do a task or assignment. | Levine & Wheelless (1997) |
| Flattery/Ingratiation | Before asking target do something, leader attempts to make target feel wonderful or important. | Rule, Bisanz, & Kohn (1985) |
| Foot-in-the-Door | Targets who are induced to comply with a small request are more likely to comply with subsequent larger demands | Tybout (1978) |
| Guiding | Leader describes the consequences of one or more choices. Choice A is positive and Choice B, if described, is negative (or less positive). | Ojanen (1996) |
| Indirect Request | Leader asks indirectly for target's cooperation (e.g., by hinting). | Rule, Bisanz, & Kohn (1985) |
| Inspirational Appeal | Appealing to a target's values, ideals, or aspirations to increase the target's enthusiasm or confidence. | Rule, Bisanz, & Kohn (1985); Yukl (2006) |
| Legitimizing | Claiming or verifying one's authority to influence the target. | Cialdini (2007); Yukl (2006). |
| Moral Principle-Based Appeal | An appeal is made to a moral value to elicit cooperation (i.e., leader tells target lack of compliance is immoral; altruistic reason given for compliance). | Marwell, & Schmitt (1967); Levine & Wheelless (1997); Rule, Bisanz, & Kohn (1985). |

| Strategy/Tactic | Definition/Example | Source |
|---|--|--|
| Negative Self-Feeling (Other-Based) | Leader tells target: "If you fail to comply, people you value will think worse of you." | Marwell, & Schmitt (1967) |
| Negative Self-Feeling (Self-Based) | Leader tells target: "You will feel worse about yourself if you fail to comply." | Marwell, & Schmitt (1967) |
| Norm-Based Appeal | An appeal is made to a social norm (e.g., doing one's duty) to elicit cooperation. | Rule, Bisanz, & Kohn, (1985); Marwell, & Schmitt, (1967); Levine & Wheelless (1997). |
| Obtaining Support from Higher Authority | Indicating support for the goal from those higher in the organization than the leader. | Cialdini (2007); Levine & Wheelless (1997); Rule, Bisanz, & Kohn (1985); Yukl (2006). |
| Personal Rejection | Leader withholds friendly behaviors, ignores, or otherwise rejects target until target complies. | Levine & Wheelless (1997) |
| Positive Self-Feeling (Self-Based) | Leader tells target: "You will feel better about yourself if you comply." | Marwell, & Schmitt (1967) |
| Positive Self-Feeling Other-Based) | Leader tells target: "If you comply, people you value will think better of you." | Marwell, & Schmitt (1967) |
| Pressure/Threat | Using demands, pressure, threats, or warnings to coerce the target into completing a goal. | Levine & Wheelless (1997); Marwell, & Schmitt (1967); Ojanen (1996); Rule, Bisanz, & Kohn (1985) |
| Rational Persuasion | Using logical arguments and factual evidence to persuade the target. | Yukl (2006) |
| Scarcity-Based Appeal | Placing a time limit on an offer or making a goal or opportunity seem rare so as to increase its perceived value. | Cialdini (2007); Yukl (2006) |
| Self-Promotion | Creating an appearance of being capable | Gordon (1996); Higgins, Judge, & Ferris (2003) |
| That's-Not-All | Due to lack of time, individuals process request without deliberate and rational decision-making. Influence agents present a target with an initial request, followed by an almost immediate sweetening of the deal, before the message recipient has an opportunity to respond. Technique can backfire when the original request is too costly or demanding | Cialdini (2007); Cialdini & Goldstein (2004) |
| Use of Role Relationship with Target | Leader mentions an existing role relationship with target to elicit cooperation (e.g., position power is invoked). | Levine & Wheelless (1997); Rule, Bisanz, & Kohn (1985); Yukl (2006). |

Appendix B

Existing Measures of KSAOs

| KSAO | Measure | Vendor/Author | Cost | References |
|----------------------------------|---|-------------------------------|--------------------------|---|
| ABILITY | | | | |
| Cognitive Ability | The Armed Services Vocational Aptitude Battery (ASVAB; U.S. Department of Defense, 1984). | DoD | Free | Ree, M., & Carretta, T. (1994). Factor analysis of ASVAB: Confirming a Vernon-like structure. <i>Educational and Psychological Measurement</i> , 54, 459-463. |
| | The Air Force Officer Qualifying Test (AOFQT; Department of Defense) | DoD | Free | Carretta, T., & Ree, M. (1995). Air Force Officer Qualifying Test validity for predicting pilot training performance. <i>Journal of Business and Psychology</i> , 9, 379-388. |
| | Wonderlic Personnel Test (WPT; 1992). | Wonderlic, Inc., | Proprietary - Commercial | |
| | Raven's Standard Progressive Matrices (SPM) and Raven's Standard Progressive Matrices Plus (SPM Plus) | Pearson Assessments | Proprietary - Commercial | Raven, J., Raven, J.C., & Court, J.H. (2003). Manual for Raven's Progressive Matrices and Vocabulary Scales. Section 1: General Overview. San Antonio, TX: Harcourt Assessment. |
| | The Employee Aptitude Survey (EAS) | PSI | Proprietary - Commercial | |
| Mental Agility | See measures of cognitive ability, especially Raven's SPM | | | |
| Working Memory Capacity | Working Memory Index from Weschler Adult Intelligence Scale (WAIS IV) | Pearson Assessments | Proprietary - Commercial | Ackerman, P., Beier, M., & Boyle, M. (2005). Working Memory and Intelligence: The Same or Different Constructs? <i>Psychological Bulletin</i> , 131, 30-60 |
| Social Perceptiveness—Individual | Social Insight Scale From : PDRI Social Competence Inventory (SCI; Schneider, 2001). | Developed by Robert Schneider | Free | Schneider, R. J. (2001). PDRI Social Competence Inventory (Version 2). Unpublished instrument, Personnel Decisions Research Institutes, Inc., Minneapolis. Schneider, R. J., Roberts, R. D., & Heggstad, E. D. (2002). Exploring the structure and construct validity of a self-report Social Competence Inventory. In L. M. Hough (Chair), Compound traits: The next frontier of I/O personality research Symposium conducted at the 17th Annual Conference of the Society of Industrial and Organizational Psychology, Inc., Toronto, Ontario, Canada. |

| KSAO | Measure | Vendor/Author | Cost | References |
|---------------------------------|--|--|--------------------------|---|
| Social Perceptiveness - Systems | None | | | |
| Relationship Multi-tasking | None | | | |
| PERSONALITY | | | | |
| Openness to Experience | NEO Personality Inventory -- Revised (NEO-PI-R; Costa & McCrae, 1992) | SIGMA Assessment Systems | Proprietary - Commercial | Costa, P. T., Jr., & McCrae, R. R. (1992). Four ways five factors are basic. <i>Personality and Individual Differences</i> , 13, 653-665. Costa, P. T., Jr., & McCrae, R. R. (in press). The Revised NEO Personality Inventory. In S. R. Briggs, J. Cheek, & E. Donahue (Eds.), <i>Handbook of adult personality inventories</i> . New York: Plenum. |
| | International Personality Item Pool Pleasantness scale (IPIP; Goldberg, 1999) | Developed by Lewis Goldberg Public Domain | Free | Goldberg, L. (1999). A Broad-Bandwidth, Public-Domain, Personality Inventory Measuring the Lower-Level Facets of Several Five-Factor Models. In I. Mervielde, I. Deary, F. De Fruyt, & F. Ostendorf (Eds.), <i>Personality Psychology in Europe</i> , Vol. 7.(pp. 7-28). Tilburg, The Netherlands: Tilburg University Press. Goldberg, L., et al. (2006). The international personality item pool and the future of public-domain personality measures, <i>Journal of Research in personality</i> , 40, 84-96. |
| | Global Personality Inventory (GPI; Schmit et al., 2000) | Previsor | Proprietary - Commercial | Schmit, M., Kihm, J., & Robie, C. (2000). Development of a global measure of personality. <i>Personnel Psychology</i> , 53, 153-193. |
| Sociability | Same measures as for Openness to Experiences. See also: Sociability scale of SCI (Schneider et al., 2002) Sociability scale of CPI (Gough & Bradley, 1996) Affiliation scale of PRF (Jackson, 1994) Affiliation scale of ABLE (DoD) Social Closeness scale of MPQ (Tellegen, 1982) | | | |
| Emotional Stability | Same measures as for Openness to Experience | | | |

| KSAO | Measure | Vendor/Author | Cost | References |
|------------------------|--|---|------|--|
| Achievement Motivation | Need for Achievement (Nach; Cassidy & Lynn, 1989) | Developed by Cassidy & Lynn (1989) Public Domain | Free | Cassidy, T., & Lynn, R. (1989). A multifactorial approach to achievement motivation: The development of a comprehensive measure. <i>Journal of Occupational Psychology</i> , 62, 301-312. |
| | See also: Achievement-Striving scale from International Personality Item Pool (IPIP; Goldberg, 1999) Achievement scale from Multidimensional Personality Questionnaire (MPQ; Tellegen, 1982) Achievement facet scale from NEO-PI-R (Costa & McCrae, 1992) Work Orientation scale from Assessment of Background and Life Experiences (ABLE) | | | |
| Dependability | Dependability scale From: Assessment of Background and Life Experiences (ABLE) | DoD | Free | Hough, L. M., Eaton, N. K., Dunnette, M.D., Kamp, J. D., and McCloy, R. A. (1990). Criterion-related validities of personality constructs and the effect of response distortion on those validities. <i>Journal of Applied Psychology</i> , 75, 581-595. |
| | Dependability scale From: Assessment of Individual Motivation (AIM; White & Young, 1998) | DoD | Free | White, L. A., & Young, M. C. (1998). Development and validation of the Assessment of Individual Motivation (AIM). Paper presented at the 109th Annual Convention of the American Psychological Association. San Francisco, CA. Knapp, D., Heggstad, E., & Young, M. (2004). Understanding and Improving the Assessment of Individual Motivation (AIM) in the Army's GED Plus Program (1998). Alexandria, VA: United States Army Research Institute for the Behavioral and Social Sciences. Kilcullen, R. N., White, L. A., Mumford, M. D., & Mack, H. (1995). Assessing the construct validity of rational biodata scales. <i>Military Psychology</i> , 7(1), 17-28. Young, M. C., Heggstad, E. D., Rumsey, M.G., & White, L. A. (2000, August). Army pre-implementation research findings on the Assessment of Individual Motivation (AIM). Paper presented at the annual meeting of the American Psychological Association, Washington, DC. |
| | Same measures as for Openness to Experiences See also: Control scale from Multidimensional Personality Questionnaire (MPQ; Tellegen, 1982) | | | |

| KSAO | Measure | Vendor/Author | Cost | References |
|--------------------------|--|---|--------------------------|--|
| Narcissism | Narcissistic Personality Inventory (NPI; Raskin & Terry, 1979, 1981). NPI-16 (Ames, Rose, & Anderson, 2006) | Developed by Raskin & Terry Public Domain | Free | Raskin, R., & Terry, H. (1988). A principal-components analysis of the narcissistic personality inventory and further evidence of its construct validity. <i>Journal of Applied Psychology</i> , 54, 890-902. Ames, D. R., Rose, P., & Anderson, C. P. (2006). The NPI-16 as a short measure of narcissism. <i>Journal of Research in Personality</i> , 40, 440-450. |
| Narcissism (Bright Side) | Self-Esteem scale (Rosenberg, 1965) | Developed by Rosenberg Public Domain | Free | Rosenberg, M. (1965). <i>Society and the adolescent self-image</i> . Princeton, NJ: Princeton University Press. |
| | Egoism Scale From: Supernumerary Personality Inventory (SPI; Paunonen, 2002). | Developed by Sampo Paunonen | Proprietary | Paunonen, S. V. (2002). Design and construction of the Supernumerary Personality Inventory. <i>Research Bulletin</i> , Vol. 763. London, Ontario: University of Western Ontario. Paunonen, S. V., Haddock, G., Forsterling, F., & Keinonen, M. (2003). Broad versus narrow personality measures and the prediction of behavior across cultures. <i>European Journal of Personality</i> , 17, 413-433. |
| Narcissism (Dark Side) | Manipulativeness Scale from Supernumerary Personality Inventory (SPI; Paunonen, 2002) | | | |
| Resilience | The Connor-Davidson Resilience scale (CD-RISC; Connor & Davidson, 2003) | Developed by Connor & Davidson Public Domain | Free | Connor, K. M., & Davidson, J. R. (2003). Development of a new resilience scale: the Connor-Davidson Resilience Scale. <i>Depression and Anxiety</i> , 18, 76-82. Campbell-Sills, L., Cohan, S. L., & Stein, M. B. (2006). Relationship of resilience to personality, coping, and psychiatric symptoms in young adults. <i>Behavior Research and Therapy</i> , 44, 585-599. |
| Charisma | Charisma Scale from Social Competence Inventory (SCI; Schneider, 2002) | | | |
| Integrity | Reid Report (Reid, 1957) Overt Integrity test | Vangent | Proprietary - commercial | Ones, D., Viswesvaran, C., & Schmidt, F. (1993). Comprehensive meta-analysis of integrity test validities: Findings and implications for personnel selection and theories of job performance. <i>Journal of Applied Psychology</i> , 78, 679-703. |

| KSAO | Measure | Vendor/Author | Cost | References |
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| Integrity (cont) | Personnel Reaction Blank (PRB; Gough, 1972) Personality-based Integrity test | IPAT | Proprietary - commercial | Gough, H. G. (1971). The assessment of wayward impulse by means of the Personnel Reaction Blank, <i>Personnel Psychology</i> , 24, pages 669-677. |
| | Inwald Personality Inventory (IPI) Personality-based Integrity test | IPAT | Proprietary - commercial | |
| Self-esteem | Self-Esteem scale (Rosenberg, 1965) | | | |
| "Dark side" (i.e., dysfunctional) personality traits | Hogan Development Survey (HDS; Hogan & Hogan, 1997) | Hogan Assessment Systems | Proprietary - commercial | Hogan, R. & Hogan, J. (2001). Assessing leadership: A view from the dark side. <i>International Journal of Selection and Assessment</i> , 9, 40-51. |
| Self-Confidence | Self-Confidence Scale from GPI (Schmit et al., 2000) | | | |
| Locus of Control | Rotter I-E Scale (Rotter, 1966) | Developed by Rotter Public Domain | Free | Rotter, J.B. (1966). Generalized expectancies of internal versus external control of reinforcements. <i>Psychological Monographs</i> , 80 (whole no. 609). |
| | Internal Control Index (ICI; Duttweiler, 1984) | Developed by Duttweiler Public Domain | Free | Duttweiler, P. (1984). The Internal Control Index: A Newly Developed Measure of Locus of Control. <i>Educational and Psychological Measurement</i> , 44, 209-221. Meyers, L. S., & Wong, D. T. (1988). Validation of a New Test of Locus of Control: The Internal Control Index. <i>Educational And Psychological Measurement</i> , 48, 753-761. |
| Machiavellianism | Machiavellianism Personality Scale (MPS; Dahling, Whitaker, & Levy, 2008) | Developed by Dahling et al. Public Domain | Free | Dahling, J., Whitaker, D., Levy, P. (2008). The Development and Validation of a New Machiavellianism Scale. <i>Journal of Management</i> . |
| | Mach IV (Christie & Geis, 1970) | Developed by Christie & Geis Public Domain | Free | Christie, R., & Geis, F. (1970). <i>Studies in Machiavellianism</i> . San Diego, CA: Academic Press. Barbuto, J. E., & Reimers J. M. (2002) Dispositional antecedents of intra-organizational influence tactics: a meta-analysis. Conference Proceedings, 10th annual meeting of the Institute of Behavioral and Applied Management, Denver, CO. Ramanaiah, N. V., Byravan, A., & Detwiler, F. R. J. (1994) Revised NEO personality inventory profiles of Machiavellianism and non-Machiavellian people. <i>Psychological Reports</i> , 75, 937-938. |

| KSAO | Measure | Vendor/Author | Cost | References |
|---------------------------------|--|--|------------------------------|---|
| Self-Monitoring | Self-Monitoring Scale (SMS; Snyder & Gangestad, 1986) | Developed by Snyder & Gangestad Public domain | Free | <p>Snyder M., & Gangestad, S. (1986). On the nature of self-monitoring: Matters of assessment, matters of validity. <i>Journal of Personality and Social Psychology</i>, 51, 125–139.</p> <p>Gangestad, S. W., & Snyder, M. (1991). Taxonomic analysis redux: Some statistical considerations for testing a latent class model. <i>Journal of Personality and Social Psychology</i>, 61, 141–146.</p> <p>Gangestad, S. W., & Snyder, M. (2000). Self-monitoring: Appraisal and reappraisal. <i>Psychological Bulletin</i>, 126, 530-555.</p> |
| Cultural Tolerance | Tolerance (Tucker et al., 2004) | Developed by Tucker et al. 2004) | Proprietary - Non-commercial | Tucker, M. F., Bonial, R., & Lahti, K. (2004). The definition, measurement and prediction of intercultural adjustment and job performance among corporate expatriates. <i>International Journal of Intercultural Relations</i> , 28, 221-251. |
| Action versus State Orientation | Action-Control Scale (ACS; Kuhl, 1985) | Developed by Kuhl (1994) | Free | <p>Kuhl, J., & Beckmann, J. (Eds.). (1994). <i>Volition and personality: Action versus state orientation</i>. Seattle, WA: Hogrefe & Huber.</p> <p>Kuhl, J. (1985). Volitional mediators of cognition-behavior consistency: Self-regulatory processes and action versus state orientation. In J. Kuhl & J. Beckmann (Eds.), <i>Action control: From cognition to behavior</i> (pp. 101-128). New York: Springer-Verlag.</p> <p>Diefendorff, J. M., Hall, R. J., Lord, R. G., & Streat, M. L. (2000). Action-state orientation: Construct validity of a revised measure and its relationship to work-related variables. <i>Journal of Applied Psychology</i>, 85, 250-263.</p> |
| EXPERIENCE | | | | |
| Past Leadership Experience | None | | | |
| Prior Influence Experience | Prior Influence Experience (PINFL; Atwater et al., 1999) | Developed by Atwater et al. (1999) | Proprietary - Non-commercial | Atwater, L. E., et al. (1999). A longitudinal study of the leadership development process: Individual differences predicting leader effectiveness. <i>Human Relations</i> , 52, 1543-1562. |

| KSAO | Measure | Vendor/Author | Cost | References |
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| MOTIVES | | | | |
| Motivation to Lead | Motivation to Lead (MTL; Chan & Drasgow, 2001) | Developed by Chan & Drasgow (2001) Public Domain | Free | Chan, K., & Drasgow, F. (2001). Toward a theory of individual differences and leadership: Understanding the motivation to lead. <i>Journal of Applied Psychology</i> , 86, 481-498. |
| | Motivation to Lead - Expanded (MTL; Amit et al., 2007) | Expanded by Amit et al. (2007) based on original scale by Chan & Drasgow (2001) Public Domain | Free | Amit, K. et al. (2007). Motivation to lead: Research on the motives for undertaking leadership roles in the Israel Defense Forces (IDF). <i>Military Psychology</i> , 19, 137-160. |
| Possess Army Values | Professional Values items from SSMP (1996) | DoD Public Domain | Free | Schumm, W. R., Gade, P. A., & Bell, B. (2003). Dimensionality of military professional values items: An exploratory factor analysis of data from the Spring 1996 Sample Survey Of Military Personnel. <i>Psychological Reports</i> , 92, 831-841. |
| Leadership Self-Efficacy Leadership Self-Efficacy (cont) | Leadership Efficacy (Chemers et al., 2000) | Developed by Chemers et al. (2000) | Proprietary - Non-commercial | Chemers, M. M., Watson, C. B., & May, T.(2000). Dispositional affect and leadership effectiveness: A comparison of self-esteem, optimism, and efficacy. <i>Personality and Social Psychology Bulletin</i> , 26, 267-277. |
| | Leadership Self-Efficacy (LSE; Ng, Ang, & Chan, 2008) | Modification of Chemers et al.(2000) scale | Proprietary - Non-commercial | Ng, K., Ang, S., & Chan, K. (2008). Personality and leader effectiveness: A moderated mediation model of leadership self-efficacy, job demands, and job autonomy. <i>Journal of Applied Psychology</i> , 93, 733-743. |
| | Leadership Self-Efficacy (LSE; Chan & Drasgow, 2001) | Modification of Feasel (1995) scale | Proprietary - Non-commercial | Chan, K., & Drasgow, F. (2001). Toward a theory of individual differences and leadership: Understanding the motivation to lead. <i>Journal of Applied Psychology</i> , 86, 481-498. Feasel, K. E. (1995). Mediating the relation between goals and subjective well-being: Global and domain-specific variants of self-efficacy. Unpublished master's thesis, University of Illinois at Urbana-Champaign. |

| KSAO | Measure | Vendor/Author | Cost | References |
|------------------------|--|--|--------------------------|--|
| SELF-REGULATION | | | | |
| Emotional Control | Emotion Control scale From : Social Skills Inventory (Riggio, 1986, 1989) | Mindgarden | Proprietary - commercial | <p>Riggio, R. E., Riggio, H. R., Salinas, C., & Cole, E. (2003). The role of social and emotional communication skills in leader emergence and effectiveness. <i>Group Dynamics: Theory, Research, in Practice</i>, 7, 83-103.</p> <p>Riggio, R.E., & Taylor, S.J. (2000). Personality and communication skills as predictors of hospice nurse performance. <i>Journal of Business and Psychology</i>, 15, 347-355.</p> <p>Riggio, R. E. (1986). Assessment of basic social skills. <i>Journal of Personality and Social Psychology</i>, 51, 649-660.</p> |
| | Emotion Regulation Questionnaire (ERQ; Gross & John, 2003) | Developed by Gross & John Public Domain | Free | Gross, J. J., & John, O. P. (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being. <i>Journal of Personality and Social Psychology</i> , 85, 348-362. |
| Impression Management | Paulhus Deception Scales (PDS), also known as Version 7 of the Balanced Inventory of Desirable Responding (BIDR) | Developed by Del Paulhus - See note about research vs. commercial use. Multi-Health Systems | Proprietary - commercial | <p>Paulhus, D. L. (1998). The Balanced Inventory of Desirable Responding (BIDR-7). Toronto/Buffalo: Multi-Health Systems.</p> <p>Paulhus, D. L. (1991). Measurement and control of response bias. In J. P. Robinson, P. R. Shaver, & L. S. Wrightsman (Eds.), <i>Measures of personality and social psychological attitudes</i> (pp. 17-59). New York: Academic Press.</p> |
| | Impression-Management Scale (Bolino & Turnley, 1999) | Developed by Bolino & Turnley Public Domain | Free | <p>Bolino, M. C., & and Turnley W. H. (1999). Measuring Impression Management in Organizations: A Scale Development Based on the Jones and Pittman Taxonomy. <i>Organizational Research Methods</i>, 2, 187-206.</p> <p>Turnley, W.H., & Bolino, M.C. (2001). Achieving desired images while avoiding undesired images: Exploring the role of self-monitoring in impression management. <i>Journal of Applied Psychology</i>, 86, 351-360.</p> <p>Jones, E. E., & Pittman, T. S. (1982). Toward a general theory of strategic self-presentation. In J. Suls (Ed.), <i>Psychological perspectives on the self</i> (pp. 231-261). Hillsdale, NJ: Lawrence Erlbaum.</p> |

| KSAO | Measure | Vendor/Author | Cost | References |
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| PROCEDURAL KNOWLEDGE & SKILL | | | | |
| Political Skill | Political Skill Inventory (PSI; Ferris et al., 2005) | Developed by Gerald Ferris et al. Public Domain | Free | Ferris, G. R., Treadway, D. C., Kolodinsky, R. W., Hochwarter, W. A., Kacmar, C. J., Douglas, C., & Frink, D. D. (2005). Development and validation of the Political Skill Inventory. <i>Journal of Management</i> , 31, 126-152. |
| Perspective Taking | Perspective Taking Scale From: The Interpersonal Reactivity Index (IRI; Davis, 1983) | Developed by Mark Davis Public domain | Free | Davis, M. H. (1980). A multidimensional approach to individual differences in empathy. <i>JSAS Catalog of Selected Documents in Psychology</i> , 10, 85. Davis, M. H. (1983). Measuring individual differences in empathy: Evidence for a multidimensional approach. <i>Journal of Personality and Social Psychology</i> , 44, 113-126. |
| Behavioral Flexibility | Functional Flexibility Index (FFI; Paulhus & Martin, 1988) From : Battery of Interpersonal Capabilities (BIC; Paulhus & Martin, 1987) | Developed by Paulhus & Martin Public Domain | Free | Paulhus, D. L., & Martin, C. L. (1987). The structure of personality capabilities. <i>Journal of Personality and Social Psychology</i> , 52, 354-365. Paulhus, D. L., & Martin, C. L. (1988). Functional flexibility: A new conception of interpersonal flexibility. <i>Journal of Personality and Social Psychology</i> , 55, 88-101. |
| | Flexibility (Tucker et al., 2004) | Developed by Tucker et al. (2004) | Proprietary - Non-commercial | Tucker, M. F., Bonial, R., & Lahti, K. (2004). The definition, measurement and prediction of intercultural adjustment and job performance among corporate expatriates. <i>International Journal of Intercultural Relations</i> , 28, 221-251. |
| | Social Control scale From : Social Skills Inventory (Riggio, 1986, 1989) | Mindgarden | Proprietary - commercial | Riggio, R. E., Riggio, H. R., Salinas, C., & Cole, E. (2003). The role of social and emotional communication skills in leader emergence and effectiveness. <i>Group Dynamics: Theory, Research, in Practice</i> , 7, 83-103. Riggio, R.E., & Taylor, S.J. (2000). Personality and communication skills as predictors of hospice nurse performance. <i>Journal of Business and Psychology</i> , 15, 347-355. Riggio, R. E. (1986). Assessment of basic social skills. <i>Journal of Personality and Social Psychology</i> , 51, 649-660. |

| KSAO | Measure | Vendor/Author | Cost | References |
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| Frame Changing | None | | | |
| Metacognitive Skill | Military Leader Exercise (MLE; Marshall-Mies et al., 2000) | Developed by Joanna Marshall-Mies et al. | Proprietary - Non-commercial | Marshall-Mies, J.C., et al. (2000). Development and evaluation of cognitive and metacognitive measures for predicting leadership potential. <i>Leadership Quarterly</i> , 11, 135-153. |
| Behavior Matching | None. See Chartrand & Bargh (1999) for an approach to studying Behavioral Mimicry in the lab. | | | |
| Situational Awareness | Situation Awareness Global Assessment Technique (SAGAT; Strater et al., 2001) | Endsley | Proprietary - commercial | <p>Endsley, M.R. (2000). Direct measurement of situation awareness: Validity and use of SAGAT. In M. R. Endsley & D. J. Garland (Eds.), <i>Situation awareness analysis and measurement</i>. Mahwah, NJ: LEA.</p> <p>Endsley, M. R., Selcon, S. J., Hardiman, T. D., & Croft, D. G. (1998). <i>A comparative evaluation of SAGAT and SART for evaluations of situation awareness</i>. Proceedings of the Human Factors and Ergonomics Society Annual Meeting (pp. 82-86). Santa Monica, CA: Human Factors and Ergonomics Society.</p> <p>Strater, L. D., Endsley, M. R., Pleban, R. J., & Matthews, M. D. (2001). <i>Measures of platoon leader situation awareness in virtual decision making exercises</i> (No. Research Report 1770). Alexandria, VA: Army Research Institute.</p> <p>Endsley, M. R. (1995). Measurement of situation awareness in dynamic systems. <i>Human Factors</i>, 37, 65-84.</p> |
| | Situational Awareness Rating Technique (SART; Taylor, 1990) | Taylor (1990) | Proprietary - Non-commercial | <p>Taylor, R. M. (1990). Situational awareness rating technique (SART): The development of a tool for aircrew systems design. In <i>Situational Awareness in Aerospace Operations (AGARD-CP-478)</i> (pp. 3/1 - 3/17). Neuilly Sur Seine, France: NATO - AGARD.</p> <p>P. Salmon, N. Stanton, G. Walker, and D. Green. Situation Awareness Measurement: A Review of Applicability for C4i Environments. <i>Applied Ergonomics</i>, 37, 225-238, 2006.</p> <p>Endsley, M. R., Selcon, S. J., Hardiman, T. D., & Croft, D. G. (1998). <i>A comparative evaluation of SAGAT and SART for evaluations of situation awareness</i>. Proceedings of the Human Factors and Ergonomics Society Annual Meeting (pp. 82-86). Santa Monica, CA: Human Factors and Ergonomics Society.</p> |

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| Situational Awareness (cont.) | Situational Awareness Scale (Eid et al., 2004) | Developed by Eid et al. Public Domain | Free | Eid, J. et al. (2004). Situation awareness and transformational leadership in senior military leaders: An exploratory study. <i>Military Psychology</i> , 16, 203-209. |
| | Several other measures of SA are available. See Table 3 in Salmon et al. (2006) for a summary and review of SA measurement techniques. | | | |
| Emotional Intelligence | Meyer, Salovey, Caruso Emotional Intelligence Test (MSCEIT; Mayer, Salovey, & Caruso, 2003) | Multi-Health Systems, Inc. | Proprietary - commercial | <p>Mayer, J., Salovey, P., Caruso, D., & Sitarenios, G. (2003). Measuring emotional intelligence with the MSCEIT V2.0. <i>Emotion</i>, 3, 97-105.</p> <p>Mayer, J. D., Salovey, P., & Caruso, D. (2000). Models of emotional intelligence. In R. J. Sternberg (Ed.), <i>Handbook of human intelligence</i> (2nd ed.)(pp. 396-420). New York, NY: Cambridge University Press.</p> <p>Barling, J., Slater, F., & Kelloway, E. K. (2000). Transformational leadership and emotional intelligence: An exploratory study. <i>Leadership and Development Journal</i>, 21, 157-161.</p> <p>Barbuto, J., & Burbach, M. (2006). The emotional intelligence of transformational leaders: A field study of elected officials. <i>Journal of Social Psychology</i>, 146, 51-64.</p> |
| | Emotional Quotient Inventory (EQ-I; Bar-On, 1997) <i>Note: This is a popular mixed model measure of EI.</i> | Multi-Health Systems, Inc. | Proprietary - commercial | Bar-On, R. (1997). <i>BarOn Emotional Quotient Inventory: Technical Manual</i> . Toronto:Multi-Health Systems. |
| Emotional Awareness | Emotional Sensitivity scale From: Social Skills Inventory (Riggio, 1986, 1989) | Mindgarden | Proprietary - commercial | <p>Riggio, R. E., Riggio, H. R., Salinas, C., & Cole, E. (2003). <i>Group Dynamics: Theory, Research, in Practice</i>, 7, 83-103.</p> <p>Riggio, R.E., & Taylor, S.J. (2000). Personality and communication skills as predictors of hospice nurse performance. <i>Journal of Business and Psychology</i>, 15, 347-355.</p> <p>Riggio, R. E. (1986). Assessment of basic social skills. <i>Journal of Personality and Social Psychology</i>, 51, 649-660.</p> |

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|--------------------------------|--|--|------------------------------|---|
| Cultural Knowledge Acquisition | None | | | |
| Cultural Intelligence | CQ Scale (CQS; Ang et al., 2004; 2007) | Developed by Ang et al. Public Domain | Free (for research purposes) | <p>Ang, S., Van Dyne, L., Koh, C., & Ng, K. Y. (2004, August). The measurement of cultural intelligence. Paper presented at the 2004 Academy of Management Meetings Symposium on Cultural Intelligence in the 21st Century, New Orleans, LA.</p> <p>Templer, K. J., Tay, C., & Chandrasekar, N. A. (2005). Motivational cultural intelligence, realistic job preview, realistic living conditions preview, and cross-cultural adjustment. <i>Group and Organization Management</i>, 31(1), 154-173.</p> <p>Ang, S., van Dyne, L., & Koh, C. (2006). Personality correlates of the four-factor model of cultural intelligence. <i>Group & Organization Management</i>, 31, 100-123.</p> <p>Ang, S. et al. (2007) Cultural intelligence: Its measurement and effects on cultural judgment and decision making, cultural adaptation and task performance. <i>Management and Organization Review</i>, 3, 335-371.</p> |
| | Cultural Intelligence Scale (Earley & Mosakowski, 2004) | Developed by Earley & Mosakowski Public domain | Free | <p>Earley, C., & Mosakowski, E. (2004). Cultural intelligence. <i>Harvard Business Review</i>, 82, 139-146.</p> <p>Earley, P. C., & Ang, S. (2003). <i>Cultural intelligence: Individual interactions across cultures</i>. Stanford, CA: Stanford University Press.</p> |
| Social Problem Solving Skills | Social Judgment Skills | Developed by Zaccaro et al. | Proprietary - Non-commercial | <p>Zaccaro, S. J., et al. (2000). Assessment of leader problem-solving capabilities. <i>Leadership Quarterly</i>, 11, 37-64.</p> <p>Shorris, E. (1984). <i>Scenes from corporate life: The politics of middle management</i>. New York: Penguin.</p> |
| Social Metacognition | None | | | |
| Conflict Management | Managing Interpersonal Conflict Scale From: Interpersonal Competence Questionnaire (ICQ) | Developed by Buhrmester et al. (1988) Public Domain | Free | <p>Buhrmester, D., Furman, W., Wittenberg, M. T., & Reis, H. T. (1988). Five domains of interpersonal competence in peer relationships. <i>Journal of Personality and Social Psychology</i>, 55, 991-1008.</p> |

| KSAO | Measure | Vendor/Author | Cost | References |
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| Tacit Knowledge Relevant to Influencing Others | Tacit Knowledge for Military Leaders (TKML; Hedlund et al., 2003) | Developed by Hedlund et al. (2003) | Proprietary - Non-commercial | Hedlund, J. et al. (2003). Identifying and assessing tacit knowledge: Understanding the practical intelligence of military leaders. <i>Leadership Quarterly</i> , 14, 117-140. |
| | Tacit Knowledge Inventory for Managers (TKIM; Wagner & Sternberg, 1986) | Developed by Wagner & Sternberg (1986) | Proprietary - commercial | Wagner, R. K., & Sternberg, R. J. (1986). Tacit knowledge and intelligence in the everyday world. In R. Sternberg & R. Wagner (Eds.), <i>Practical intelligence: Nature and origins of competence in the everyday world</i> . New York: Cambridge University Press. Wagner, R. K., & Sternberg, R. J. (1987). Tacit knowledge in managerial success. <i>Journal of Business and Psychology</i> , 1, 301-312. |
| Oral Communication Skills | Foster Open Communication Scale From: PROFILOR (Hezlett et al., 1997) | Personnel Decisions International | Proprietary - commercial | Hezlett, S., Ronnkvist, A, Holt, K., & Hazucha, J. (1997). The PROFILOR Technical Summary, Personnel Decisions International, Minneapolis, MN. Kowske, B. J., & Anthony, K. (2007). Towards defining leadership competence around the world: What mid-level managers need to know in 12 countries. <i>Human Resource Development International</i> , 10, 21-41. |
| Listening Skill | Listen to Others Scale From PROFILOR (Hezlett et al., 1997) | | | |
| INFLUENCE BEHAVIOR | | | | |
| Influence Tactics | Profile of Organizational Influence (POIS; Kipnis & Schmidt, 1982) Based on modifications made to the original Kipnis et al. (1980) items and scales (see Table 4 for original items and scales). | Mindgarden | Proprietary - commercial | Kipnis, D., Schmidt, S. M., & Wilkinson, I. (1980). Intraorganizational influence tactics: Explorations in getting one's way. <i>Journal of Applied Psychology</i> , 65, 440–452. Schriesheim, C., A., & Hinkin, T., R. (1990). Influence tactics used by subordinates: A theoretical and empirical analysis and refinement of the Kipnis, Schmidt, and Wilkinson scales. <i>Journal of Applied Psychology</i> , 75, 246-257. |
| | Leadership Tactics Questionnaire (Yukl & Falbe, 1990) Reconceptualization on POIS | Developed by Yukl & Falbe (1990); revision of scale originally developed by Kipnis, Schmidt, & Wilkinson (1980) | Proprietary - Non-commercial | Yukl, G., & Falbe, C. M. (1990). Influence tactics and objectives in upward, downward, and lateral influence attempts. <i>Journal of Applied Psychology</i> , 75, 132-140. Kipnis, D., Schmidt, S. M., & Wilkinson, I. (1980). Intraorganizational influence tactics: Explorations in getting one's way. <i>Journal of Applied Psychology</i> , 65, 440–452. |

| KSAO | Measure | Vendor/Author | Cost | References |
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| Influence Tactics (cont.) | Influence Behavior Questionnaire (IBQ; Yukl, Wall, & Lepsinger, 1990) | Developed by Yukl et al. (1990) | Proprietary - Non-commercial Found examples of use in research with permission from Gary Yukl. | Yukl, G. A., Wall, S., & Lepsinger, R. (1990). Preliminary report on validation of the management practice survey. In K. E. Clark, & M. B. Clark (Eds.), <i>Measures of leadership</i> (pp. 223–237). West Orange, NJ: Leadership Library of America. Yukl, G. A., Lepsinger, R., & Lucia, T. (1992). Preliminary report on the development and validation of the influence behavior questionnaire. In K. E. Clark, & B. Clark (Eds.), <i>The impact of leadership</i> (pp. 417–427). Greensboro, NC: Center for Creative Leadership. Yukl, G. A., & Tracey, J. B. (1992). Consequence of influence tactics used with subordinates, peer, and the boss. <i>Journal of Applied Psychology</i> , 77, 525–535. |
| | Applying Influence Strategies: Advisor Version | Developed by ARI and PDRI | Free; designed for Army | Ramsden Zbylut, M., Wisecarver, M., Foldes, H., & Schneider, R. (2010a). Advisor Influence Strategies: 10 Cross-Cultural Scenarios for Discussion and Self-Assessment (Instructor's Manual). (ARI Research Product 2010-05). Arlington, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. Ramsden Zbylut, M., Wisecarver, M., Foldes, H., & Schneider, R. (2010b). Advisor Influence Strategies: 10 Cross-Cultural Scenarios for Self-Assessment and Reflection. (ARI Research Product 2011-01). Arlington, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. |
| LEADERSHIP STYLES | | | | |
| Destructive Leadership | Abusive Supervision Scale (Tepper, 2000) | Developed by Bennett Tepper (2000) Public Domain | Free | Tepper, B. J. (2000). Consequences of abusive supervision. <i>Academy of Management Journal</i> , 43, 178-190. |
| Transformational Leadership and Transactional Leadership | Multifactor Leadership Questionnaire (MLQ; Avolio, Bass, & Jung, 1995) | Mindgarden | Proprietary - commercial | Avolio, B., Bass, B., & Jung, D. (1995). Multifactor Leadership Questionnaire technical report. Redwood City, CA: Mindgarden. Bass, B., & Avolio, B. (2000). <i>MLQ Multifactor Leadership Questionnaire</i> . Redwood City: Mindgarden. |

| KSAO | Measure | Vendor/Author | Cost | References |
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| Transformational Leadership and Transactional Leadership (cont.) | | | | <p>Antonakis, J., Avolio, B.J., & Sivasubramaniam, N. (2003). Context and leadership: An examination of the nine-factor full-range leadership theory using the Multifactor Leadership Questionnaire. <i>The Leadership Quarterly</i>, 14, 261-295.</p> <p>Avolio, B., & Bass, B. (2004). <i>Multifactor leadership questionnaire. Manual and sampler set</i>, 3rd ed. Redwood City: Mindgarden, Inc.</p> <p>Avolio, B. J., et al. (2003). Predicting Unit Performance by Assessing Transformational and Transactional Leadership. <i>Journal of Applied Psychology</i>, 88, 207-218.</p> |
| Leader-Member Exchange | LMX7 | <p>Developed by Graen & Uhl-Bien</p> <p>Public Domain</p> | Free | <p>Graen, G., & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective. <i>Leadership Quarterly</i>, 6, 219-247.</p> <p>Gerstner, C.R., & Day, D.V. (1997). Meta-analytic review of leader-member exchange theory: Correlates and construct issues. <i>Journal of Applied Psychology</i>, 82, 827-844.</p> |
| | Multidimensional Measure of LMX (LMX-MDM ; Liden & Maslyn, 1998) | <p>Developed by Liden & Maslyn</p> <p>Public Domain</p> | Free | <p>Liden, R., & Maslyn, J. (1998). Multidimensionality of leader-member exchange: An empirical assessment through scale development. <i>Journal of Management</i>, 24, 43-72.</p> |